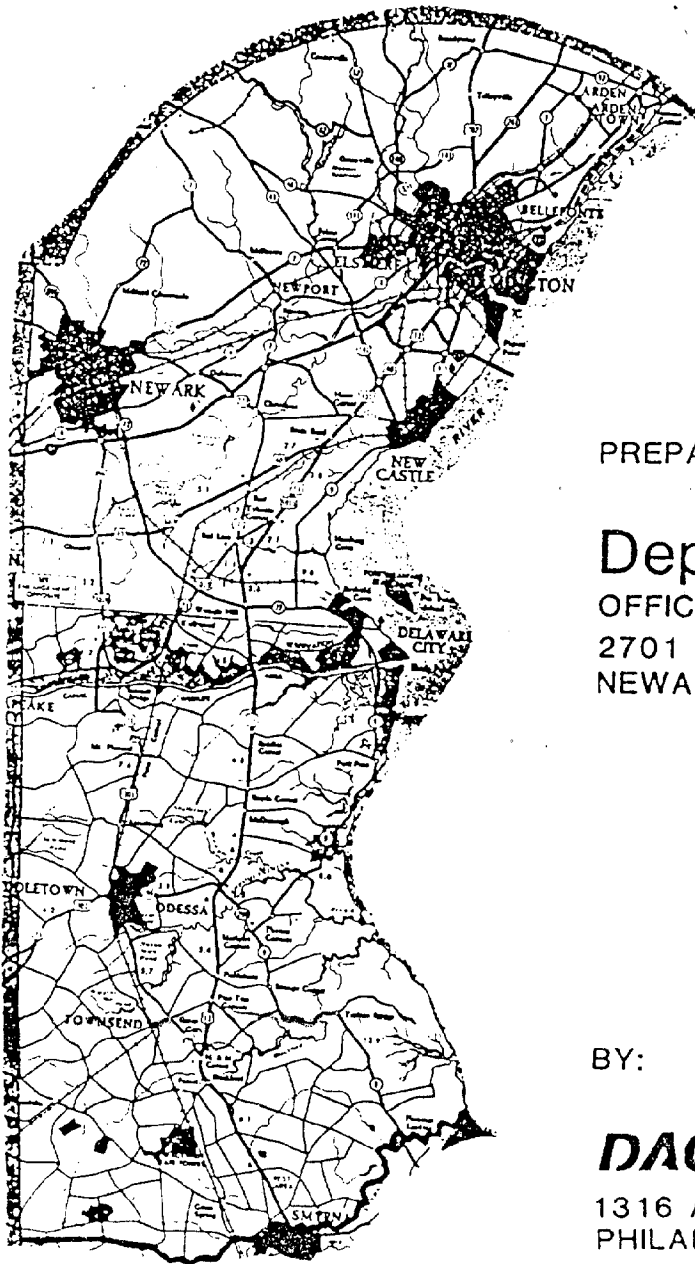


ZONING CODE UPDATE - PHASE II NEW CASTLE COUNTY, DELAWARE

CZIC COLLECTION



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Delaware - Coastal Zone Management Program

ZONING CODE UPDATE - PHASE II

NEW CASTLE COUNTY, DELAWARE

OCTOBER 1982

PREPARED FOR:

THE NEW CASTLE COUNTY DEPARTMENT OF PLANNING

UNDER CONTRACT WITH :

THE STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

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CONSULTANTS TO THE DEPARTMENT OF PLANNING:

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CHAPTER I

Residential Districts

1. Introduction

The largest districts, including most areas of undeveloped land and agricultural land, are zoned for residential development. Typically, areas which have not yet experienced development and are not identified on a comprehensive plan for specific types of development are zoned for single-family residential use and/or agricultural use.

The major purposes in reviewing the residential districts of the New Castle Code are to increase flexibility of these districts, to improve site planning goals, to reflect newer residential unit types, and to clarify the structure of the Code sections.

Trends in residential development in recent years have included a move away from the large single-family detached home, the building of more attached "row" units, more units with common walls in general, condominium ownership in multi-family projects, clustering of structures, and a variety of homeownership associations and management systems for treatment of areas maintained in common.

The trends in residential development have come about as a result of demographic and economic changes which have had a profound effect on the housing industry and the capability of the American household to afford housing. Housing has become more expensive, due to rising construction, labor, energy, and commuting costs and increases in the cost of borrowing money. Households have become smaller on the average, due to deferred marriage and childbearing. One- and two-person households are more common. As a result, the housing industry has looked toward "downsizing" residential units, attached units, condominiums, and clustering to continue to serve the housing needs of the public.

2. Traditional Residential Unit Types Single-Family Detached

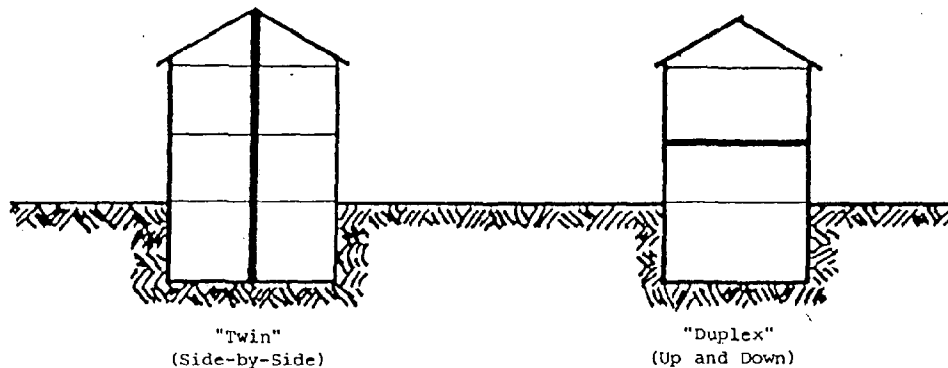
The single-family detached home on an ample lot in a nice residential neighborhood is still the dream for most young Americans raising families. Single-family home subdivisions remain the most common form of residential development in suburban and urban fringe locations. Single-family detached homes come in a wide variety of sizes on lots of varying size. The size of the lots and the size of the structures tend to have a direct relationship to each other and to expense, as larger lots tend to be developed with larger structures and more expensive homes. Single-family detached homes serve primarily the middle- and upper-income family in today's housing market, and tend to be located in areas where auto ownership is essential.

Two-family

Two-family homes are common in most of the older urbanized areas of the U.S., and continue to be constructed in newly developing areas around the cities. The advantages of a two-family home for a homeowner are reduced costs. There may be income from a rental unit and in most cases savings on utilities and

construction costs due to the two units being located under the same roof. Two-family homes have been developed for decades in two styles: side-by-side or "twin", and up-and-down or "duplex". These two styles are depicted in Figure 1. below.

Figure 1. Two Common Styles of Two-Family Houses



Some of the problems associated with two-family homes, which make them less popular than single-family homes, include coordination of maintenance, the possible need to share a driveway with occupants of another dwelling unit, noise between units, and the higher potential that the property will not be owner-occupied. Another variant of the two-family structure is the "semi-detached" house, a "twin" house with a fire-wall in the center, defining a common lot line and sold as two separate properties. This type of two-family house eliminates to a large degree the problems of investor-ownership and noise between units.

Row Houses

Row houses or townhouses are a mixture of single-family and multi-family occupancy in the sense that several dwelling units are located under the "same" continuous roof, but each row house unit provides its own entry, and may have its own front and rear yard. End units may also have a side yard. Row houses can be developed as either rental units, sometimes more than one unit per house, or as owner-occupied units. A design problem with row houses is the provision of parking; unless an alley network is developed, parking must be developed as pads in the front yard or in garages occupying much of the width of the ground floor of the unit. These solutions to providing parking for townhouses are not aesthetically pleasing, and also consume much of the street frontage or rear yard. The street frontage would otherwise be available for on-street parking, in curb cuts for the driveways or parking pads.

Row houses, like two-family houses, may have common wall noise as a problem when the walls are not thick enough to prevent noise penetration. Noise penetration is usually minimized if 8" or 10" block is used in party wall construction. Both these unit types generally occupy smaller land area and are usually built with smaller floor areas than single-family detached houses. As a result they are more often affordable for middle-income families. Row houses provide

ownership potential for an income group that may not be able to afford homeownership in a freestanding single-family home.

Garden Apartments

Garden apartments are multi-family structures of a low-rise configuration, generally only two or three stories high, with common open landscaped areas around and between buildings and common parking lots. Almost always constructed for rental purposes, they tend to attract singles, childless couples, and "empty nesters" rather than families with children. Common sizes for garden apartment buildings are from four to twelve units per structure, and most are located in garden apartment developments where several buildings are constructed at the same time. Most such developments provide laundry facilities in the building; some provide recreational facilities such as swimming pools, tennis courts, playgrounds, or tot-lots for the residents of the apartments. Group parking lots consume large site areas in these developments.

High-Rise Apartments

High-rise or elevator apartments are a relatively new type of housing in suburban and small town areas. In cities they have been common since the advent of the elevator. Dwelling units developed in elevator apartments are apt to be smaller than in garden apartments, (residents with children are less common), and the units are less apt to provide private open spaces except for terraces or balconies. The major advantages of high-rise apartments are elevated views, economies of scale, and relative security and privacy. The size of such buildings can bring enough residential units to justify small shopping facilities such as convenience groceries, drug stores, beauty or barber shops, dry cleaning and laundry pick-ups, and delicatessens. Such facilities may be located on the ground floor of the residential building or in adjacent structures. The scale of the buildings may also allow for a doorman or security person and full-time management and maintenance.

3. Non-Traditional and New Residential Unit Types

Group Residences

A number of types of group residences have existed in America for some time, particularly among some religious sects and groups whose cultures favored the extended family living together. Such groups as the Quakers and the Amish have attempted and succeeded in living communally for both religious and economic purposes. More recently group residences have become common in many communities as transitional residences for persons re-entering the community from prisons, mental institutions, drug and alcohol treatment facilities, and for mentally retarded persons requiring minimum supervision. Often called "halfway houses" or "transitional service facilities", such group homes often can be integrated with other types of residences. However, many people object to these group homes being placed in traditional family neighborhoods, and the treatment of group homes in a zoning ordinance can be a very sensitive issue.

Mother/Daughter Residences

An outgrowth of the expense of housing in recent years and a return to the

importance of family ties is the mother/daughter residence. Such a dwelling unit type has a family-sized unit and a smaller unit for a single person. The units are generally located in the same building; such residential types are differentiated from two-family units both by the unequal size of the dwellings in the house and by the direct family relationship between the occupants. A similar concept is the "elder cottage" located on the same lot, generally to the rear of the family residence, and occupied by a grandparent or grandparents who have separate kitchen and bath facilities. Both mother/daughter residences and elder cottages are often compatible with single-family residences, as they share the quality of familial relationship. Smaller lot subdivisions, 15,000 sq. ft. or less, may be too confined to permit this type of development. The size of the extended family on the lot and the number of automobiles in use may not differ much from a family with grandparents or a grown child living in the same unit.

Accessory Apartments

Particularly attractive to "empty nesters" or retirees who have difficulty maintaining the costs of their single-family home, accessory apartments are small residential units, typically converted from a garage or unfinished attic, which provide inexpensive housing for one occupant while assisting the owners in maintaining their home.

Conversions of Large Older Homes

The New Castle County Code already permits conversion of large homes over 20 years old upon granting of a Special Exception by the Zoning Board of Adjustment. Many codes, particularly in areas where heating costs are high, permit the conversions as of right in the codes upon specific written conditions. The criteria used for measuring whether conversions should be permitted include total floor area of structure and minimum square footage per unit type (studio, 1-bedroom, 2-bedroom, and larger). Off-street parking is required on the lot for each unit. Some codes require higher amounts of open space and larger floor areas for apartments in converted houses than are required for new construction and to compensate for the need to redesign the structure for use by more than one family.

Condominium Residential Ownership

Beginning in the 1970's, a major trend in residential marketing evolved from the concept of condominium ownership, both in newly constructed buildings and in conversion of existing multi-family ownership. Condominiums offer a form of ownership whereby an individual unit owner has fee simple to the interior of his/her unit, and is solely responsible for its upkeep, while being a member of a homeowner's association which has title to common elements such as hallways, roof, lobby, entrances, parking and open space areas. Details of which elements are owned by individuals and which are owned by the association vary with building type. Condominium owners are obliged to pay a common areas maintenance fee, monthly or yearly, in addition to costs associated with purchase and upkeep on their individual unit. Condominium conversion of existing multi-family structures has been a volatile issue in many communities with rental housing in high demand. Most states and many local municipalities experiencing high demand for condominium conversion passed legislation to control the volume of such conversions and/or the speed with which it could take place in existing rental

Zero-Lot-Line Design

A technique utilized in recent years to add to the flexibility of siting single-family homes is zero-lot-line placement of structures. This practice has the effect of eliminating one yard space entirely, most typically a side yard, thereby creating a more useable yard size on the opposite side of the house. The use of zero-lot-line houses is particularly desirable for creation of moderately priced houses on small lots, creating a planned development in the 5 to 8 units per acre range. The design of structures may be restricted by prohibiting openings on the side of the structure which abuts the lot line; the house may then open up to its yard on two or three sides. Often, such houses are designed with private courts screened from the lot line.

4. Special Uses in Residential Districts

A number of uses which are not purely residential in character have traditionally been developed in residential areas. Among these are institutional uses such as nursing homes, hospitals, schools, and colleges, and governmental and public uses such as libraries, art museums, police and fire stations, and utility substations and transformers. Most of these uses are permitted as of right in the New Castle Code. Many other municipalities subject such uses to Special Permit hearings, Site Plan Approval, or approval by the Director of Planning based upon certain conditions. Non-traditional halfway houses and group homes, and other "transitional facilities" are also usually appropriate within residential districts. These are most frequently dealt with by Special Permit requirements.

5. Recent Design and Site Planning Techniques

Residential Clusters

The concept of clustering residential units, whether single-family houses, attached units, or low-rise apartments, may be applied to small scale as well as large scale residential developments. Presently, New Castle County has a number of large cluster developments. The basic concept is to vary the density and spacing between units and buildings internally in the development, while maintaining setbacks at the perimeter of the site and overall density requirements similar to the traditional developments adjacent in the same zoning district.

Clustering may have major advantages of saving areas within the development for open space, retaining topographically and environmentally sensitive areas in their natural state, and providing the opportunity for considerable development cost savings in the provision of roads and utility lines. Sites containing particularly important natural features such as lakes, streams, wooded areas, and geologically interesting areas such as cliffs or rock outcroppings may then be developed at the overall density allowed by the zoning district, retaining the special features in their natural state. Achieving these benefits depends upon careful site planning. Residents of the development all have access to the natural areas, recreational open space, and any community facilities which may be included in common areas. Such open areas and common facilities are most typically maintained by a homeowner's association, but in some instances may be deeded to the municipality, particularly if they are to serve more than the population of the development area.

A pair of example site plans has been drawn for the theoretical development of 24 single family homes at R-2 district density (2 houses per acre). The site plans are shown in Figures 2A and 2B below.

Figure 2A shows the 12-acre site developed with 1/2 acre lots fronting a horseshoe-shaped public street, with typical front yard setbacks. Figure 2B shows 50 percent of the site as common open space, allowing for development of a pond, bike paths, and tennis courts. The houses are situated on 1/4 acre lots around two private cul-de-sacs. Front yard setbacks are reduced to 20 feet. The length of utility lines running into the cul-de-sacs and into individual houses is greatly reduced in the cluster design. Also, the amount of paving, both in the streets and in driveways is reduced, saving costs and lessening the need for stormwater drainage. Access to the open space is via rights-of-way along common side property lines.

In the cluster development, the savings in costs of utilities, paving and drainage to the developer may result in investment in common facilities such as those shown. In addition, the open space can be mapped so as to retain special natural features such as ponds, groups of trees, or steep slopes which would otherwise require extensive regrading.

Figure 2A. Conventional Development, 24 houses on 12 acre site.

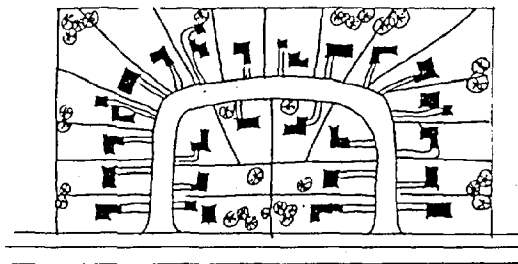
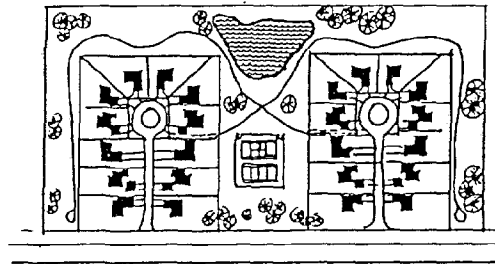


Figure 2B. Cluster Development, 24 houses on 6 acres, 6 acres of common open space.



Density Bonuses

One method of gaining lands or facilities which will serve the public and/or enhance the quality of development is to allow density bonuses for the provision of desired amenities. Such amenities may include covered parking, extra landscaping, lands set aside for public use, extra parking facilities, or recreational facilities. Specific planning goals should be formulated for definition of amenities which could be subject to bonuses in various districts or within various parts of the County. Then, additional units or other advantages may be permitted in exchange for provision of the amenities sought by the County. It is important to exchange any bonus for identified amenities, as developers will tend to seek the bonuses by the least costly method.

Mixed Use Residential Development

Many newer, larger scale developments, have incorporated neighborhood commercial, recreational, and community facilities within the residential tract being developed. This may have the advantages of more controlled use of facilities and the avoidance of poor quality "afterthought" commercial development, attendant traffic problems, and possible unsightliness. Some codes allow certain types of commercial uses designed to serve only the residents of a development, typically larger developments at lower densities or multi-family projects, as of right in the code. New Castle has already begun to address this issue in its DPUD section. Other codes permit such development within residential districts upon approval of a conditional use permit or special exception.

6. Encouraging Site Planning Flexibility

As almost all new single-family units, both detached and attached, require subdivision approval, it is within the staff review and Subdivision Advisory Committee review process that consideration of cost-saving and newer site planning techniques for subdivision may most effectively be accomplished. In this process, the staff of the Department of Planning has considerable input and authority. Individual staff members participating in subdivision review should familiarize themselves with the most current site development techniques. Many new techniques have been emerging in the sunbelt and western states. Planning and housing journals have featured a number of articles about new site development techniques, adjustments to codes to facilitate such techniques, and public acceptance and reaction to newer housing site features. Several of these articles are referenced at the conclusion of this chapter.

As the submission and approval of a subdivision plan already requires a considerable amount of information and lengthy processing, it is highly desirable to eliminate the need for additional processing time and expense associated with variances of the Zoning Code by tailoring residential district regulations to accommodate new development schemes without variances. Cluster developments which respect the overall density of the residential district, zero-lot-line developments, and other new site planning proposals which respect the basic density and character of a single-family district should be encouraged through appropriate language in the Zoning Code.

7. New Castle Code - Residential Districts

The Residential Districts in the Code commence with a typical approach by denying all other uses except those listed. There are some twenty-seven uses listed for the R-1 Districts, which include principal uses, accessory uses, and five Special Exception uses. The Code permits as of right many institutional, public service, recreational, and service uses. Some of these are clearly related to residential use and others are not. The R-2 District adds one new category of permitted uses (accessory structures related to agricultural uses), one conditional permit use (mobile dwelling unit), and fifteen special exception uses. The R-3-SD District adds semi-detached dwellings (twins) as a permitted use; the R-3 District permits garden apartments (but not semi-detached dwellings) and community garages, and moves some of the Special Exception Uses in the R-1 and R-2 Districts (specifically hospitals and sanitariums) into the permitted use category. The R-4 District permits two-family dwellings and multi-family dwellings in both garden apartment and taller buildings, and describes lot coverage, lot size, open space, maximum units per acre, and distance between buildings for apartment developments.

Area and bulk requirements for all Residential districts except the R-4 Districts are included in a separate section of the Code. This section was reviewed in Phase I of this study. The R-4 District differs from the other residential districts in describing development plan/subdivision plan submission as a preliminary step.

The Residential districts are not titled, nor do they have purpose statements. District names, identifying the major principal use first permitted in the district, would be helpful. There is no summary chart for the residential districts (or for all the districts) showing a list of permitted, specially permitted, or conditional uses.

A number of issues arose in our review of the residential districts; further detail on each of these issues is included in the recommendations following the quoted section of the New Castle Code. Concerns noted by district, are as follows:

1) R-1 DISTRICT.

"(2) The taking of nontransient boarders or roomers by a family resident on the premises; provided, that there is no display or advertising on the premises in connection with such use; and provided, that there are not more than five boarders or roomers in any one dwelling unit."

o Five boarders or roomers, in addition to a resident family, may create a use out of character with a single-family district. It is also unusual to permit roomers or boarders in a rented residence. Potential abuse of this provision could cause neighborhood problems in some instances. (Boarding and rooming houses are otherwise first permitted in the R-4 District.)

"(6) Library, museum and art gallery."

o Art galleries included in R-1 districts should not include commercial art galleries. Addition of the adjective "public" would clarify the intent of this permitted use.

"(9) Professional office or studio of a physician, dentist, lawyer, architect, engineer, musician, artist, teacher, real estate broker, registered nurse or other similar professional person, subject to the following special requirements in addition to all other applicable requirements of this chapter for the residential district in which such uses are located:

(a) The practice of such professional occupations shall be permitted in a dwelling provided the principal person so engaged is a resident thereof.

(b) Professional occupations shall be subject to the following standards:

1. Three off-street parking spaces in addition to those otherwise required in this chapter.

2. No more than two persons, except a resident, shall be employed by the practitioner of the professional occupation to provide secretarial, clerical, technical or similar assistance.

3. The area used for the practice of a professional shall occupy no more than twenty-five percent of the total floor area.

4. No manufacturing, repairing or other mechanical work shall be performed outside the dwelling unit. When such activity is conducted inside the dwelling, it shall be conducted in such a way that no noise, heat, glare, odor, vibration, electro-magnetic interference or smoke shall be perceptible at or beyond the property line.

5. No storage of materials or products outside the dwelling unit shall be permitted unless completely housed.

6. The profession shall be clearly incidental to the residential use of the dwelling unit and shall not change the essential residential character of the dwelling.

7. No external alterations inconsistent with the residential use of the dwelling unit shall be permitted.

8. No display of products shall be visible from outside the building.

(10) Customary home occupations subject to the following special requirements in addition to all other applicable requirements of this chapter for the residential district in which such cases are located:

(a) The practice of a home occupation shall be permitted in a dwelling provided the person so engaged is a resident thereof.

(b) All home occupations shall be subject to the following standards:

o The difference between the uses indicated in "Professional office or

studio..." and "Customary home occupations", where no specific occupations are listed, is not clear. It would appear that these two use categories could be merged into one. The list of required conditions of "Professional occupations" is identical to the home occupations conditions except that it adds an off-street parking requirement and limits the number of persons not residing in the dwelling that can be employed. The Code could also effectively require submission of floor plans in conjunction with the 25% limitation for the home occupation, however, this may be onerous.

"(26) Service uses incidental to a residential use, including the use of a telephone for business purposes, subject to the following special requirements:

- (a) A business telephone to accept calls for service work at another location, in addition to keeping records.
 - (b) No external evidence or on-site advertising of the use being conducted, including display advertising on service vehicles.
 - (c) All service work is done elsewhere.
 - (d) Property owner or operator of the service business does not store materials or equipment in or around his residence, either in the residence or in storage buildings on the property.
- o Service uses and business telephones also seem to be a part of the concerns covered in "professional office or studio..." and "customary home occupations", and might logically be melded into the home occupation conditions.

(14) Sewage treatment plants, sewage pumping stations and sewers.

- o Sewage treatment plants, which might have a considerable effect on adjacent residences, are a permitted use, while electric, gas, and telephone stations and offices, which may also have effects on adjacent residences, are subject to special exception hearings. This inconsistency may reflect the need to locate sewage facilities without extensive public debate.

"(18) Riding stable, accessory to a residential use; provided, that all buildings and facilities related to the care of horses or ponies are located at least three hundred feet from any property line."

- o Riding stables, accessory to residences, must be over 300 feet from the property line. As mentioned in the Board of Adjustment section of this report, this distance requirement appears to be excessive. A lower requirement, perhaps 100 feet, is more reasonable in relation to the size of most lots where horse riding might be accommodated.
- o Special exception uses are numbers (7), (13), (15), (16), and (17) in the list of uses in this district. They should be grouped and given a heading, apart from the permitted use list.

2) R-2 District

- o One of the main purposes of this district, farming and agricultural use, is not mentioned anywhere in the district regulations. While it is included by reference in that such uses are permitted in R-1, specific mention of this use, both in a district title, and in the reference to R-1, would be helpful.
- o The bulk of the regulations of this district is the list of Special Exception uses. Defining the purpose of special exception uses and hearings, as suggested in the Board of Adjustment chapter of this report, would strengthen the district's controls.

3) R-3 Districts

- o The R-3-G district, which is intended for townhouse and row house development, follows the R-4 district, which is intended for multi-family development. It would be more logical to locate it after the R-3-SD district and before the R-3 (garden apartments) district, in heirarchy of per acre density and structure type.

"(b) When an application is made to the Department of Development and Licensing for a certificate of occupancy for a garden apartment in an R-3 district, there shall be filed as part of such application a subdivision plan showing the general plan of buildings and indicating provision for parking space, interior roadways, drainage and recreation. This shall be referred to the Department of Planning for review and report on matters under their jurisdiction in control of subdivision. Approval, with or without amendment, by the Department of Planning shall be a prerequisite to further action thereon. Such subdivision plans, subject to such amendment thereof as may be recommended by the Department of Planning, shall be part of the provisions of issuance of a certificate of occupancy by the Department of development and licensing."

- o This paragraph need not describe the information to be included on the subdivision plan, but should refer the reader to the proper section of the subdivision regulations. It could then be abbreviated to approximately 1/3 its current length.

"(5) Hospitals or sanitariums, other than those for contagious diseases or for the care of epileptic, drug or alcoholic patients; charitable institutions which are not of a correctional nature and which are not intended for the care of insane or feeble-minded patients; provided, that no building so used shall be within fifty feet of any lot line; and further provided, that adequate parking space shall be provided in accordance with the requirements of article IX of this chapter, such space to be so located as not to be less than ten feet from any lot line and to have a weatherproof surface."

- (6) Hospitals for contagious diseases, correctional institutions, sanitariums or hospitals treating epileptic, drug or alcoholic patients and asylums for the mentally ill; if a special exception is granted by the Board of Adjustment, as provided in section 23-85; and

provided, that no building so used shall be within two hundred feet of any lot line; and further provided, that adequate parking space shall be provided in accordance with the requirements of article IX of this chapter, such space to be located as not to be less than ten feet from any lot line and to have a weatherproof surface.

- o The parking requirements of article IX apply to all uses in the Zoning Code, and the references made to parking facilities under Sections 23-26 (5) and (6) above need only state the distance that such parking should be from lot lines.
- o The lot size minimum, lot coverage, distance between building groups, and open area requirements of the R-3-G District, Sections 23-28 (2) (b), (c), (d), and (e), would more logically be located in the Bulk and Area Regulations section of the Code, if construction parallel to other residential districts is desired.

4) R-4 District

- o It is interesting to note that the first time a two-family residence is permitted is in a multi-family district. A number of two-family types where the units are unequal in size, offering a large unit for the owner and a smaller unit for a relative or rental purposes are described in the earlier section on residential unit types.
 - o As in the R-3-G District, the bulk and area regulations described in the R-4 District could be located in the Bulk and Area portion of the Code if parallel construction is desired.
- "(6) Office or studio of a physician, dentist, lawyer, architect, engineer, musician, artist, teacher, real estate broker, registered nurse or other similar professional person."
- o Permitted use (6) in the R-4 District is a list of office uses, which are compatible with the district. However, the wording does not include any locational restrictions, implying that such uses could be constructed in a separate building on a separate lot in the R-4 District. It is not clear if this is the intention but we would recommend that this be changed to require that the offices be on the first floor only of apartment buildings.

5) All Residence Districts

- o Aside from mention of parking facilities and garages in some of the districts, no list or definition of accessory uses is described. Such a list should include storage buildings, limit their size and location relative to lot lines, (exclusion from front yards is desirable). Other normal accessory uses for residences include child's playhouses, tennis courts, swimming pools and bath-houses, guest houses or servants quarters, fuel tanks for propane (in rear yards), and boat or travel trailer storage. Solar equipment should be on the list of permitted accessory uses, as recommended in the Phase I report and satellite antenna "dishes" should not be permitted in the front yard. Once defined in, the accessory use list need not be repeated in subsequent residential districts.

8. Residential Provisions of Other Communities' Codes

Township of Pittsgrove, Salem County, New Jersey

Pittsgrove's Land Development Ordinance has a section listing justification and intent for each zoning district, followed by a chart of area and bulk regulations, and then a schedule of district regulations in chart form, with permitted uses on the left and conditional uses on the right. Permitted uses for each zoning district are divided into principal uses and accessory uses. The format of this code is very easy to reference, and many of the uses listed either as permitted or conditional refer back to specific discussions of that use under a later section called "General Standards". Thus, the name of the use only appears in the chart, first, and later the exact description of the use and conditions for its approval are described in detail.

The Pittsgrove Ordinance also has a very interesting section allowing for a Cluster Development Option, for developments with a minimum of 30 to 40 lots in different single-family residential districts. The provisions call for open space to be established for a minimum of 25% of the gross acreage of the tracts so developed, that the open space be contiguous and concentrated as much as possible, and that there be a homeowner's association to maintain this open space. This section is reproduced in its entirety at the conclusion of this chapter as a reference. Also reproduced are two pages of the chart of uses permitted as an example of a very useful display format.

Northampton Township, Bucks County, Pennsylvania

The Northampton Zoning Ordinance of 1977 lists six goals for the regulation of all residential districts at the beginning of the Residential Districts section. Each of the three districts is organized as follows:

1. Use Regulations
 - a) By Right
 - b) Conditional Uses
 - c) Accessory Uses
 - d) Uses by Special Exception
2. Area and Development Regulations
 - a) Residential Uses
 - b) All Other Permitted Uses
3. Off-Street Parking Requirements

There is also an "AR" Agricultural-Residential District, similar to the R-2 District in New Castle County, which has the intent of preserving prime agricultural land.

Town of Hempstead, New York

This Code includes a detailed Cluster Residence Districts section, with a minimum size of ten acres for developments of this type. Maximum density permitted is four dwelling units per gross acre and eight units per net acre. The district permits single-family detached residences, townhouses up to 8 houses per structure, and home occupations for professional offices.

Hempstead has a Golden Age Residence District for Housing Authority-owned and Section 8, H.U.D.-approved sites for multi-family buildings designed especially for senior citizens. In the seven regular residential districts, sand pits and quarries are prohibited, and the height, area, and yard requirements, accessory

buildings and fences, and density of population provisions are included after the uses permitted in each district.

City of Rochester, New York

Rochester's residential districts are organized with the following headings:

- A. Purpose
- B. Permitted Uses
- C. Accessory Uses and Structures
- D. Home Occupations
- E. Temporary Uses
- F. Special Permit Uses
- G. Bulk, Space and Yard Requirements
- H. Parking Requirements
- I. Signs

The regulations for Accessory Uses, Home Occupations, Temporary Uses, Bulk, Space and Yard Requirements, Parking Requirements, and Signs are set forth in separate sections of the Code, and reference to those sections is made in each of the residential districts. There is a separate section on Special Permit uses and procedures, with uses that are specially permitted in all districts described there, while uses specially permitted in only one district are described in the district regulations. Special permit applications are heard by the City Planning Commission.

Town of Oyster Bay, New York

Oyster Bay's use list includes the mother/daughter residence upon approval by the Zoning Board of Appeals, beginning in the A Residence District. Permitted uses, specially permitted uses, and uses requiring site plan approval by the town board are listed together in lengthy lists as in the New Castle Code. There is a separate "Housing Authority and Senior Citizen's (S-1) Zone.

Kent County, Maryland

Kent County has five residential districts, but three of these are grouped together in Section 2., R.R., R-1, and R-2, Single-family Residential Districts. The other two districts are R Rural District, and R-3 Multiple-family Residential District. In each of the three sections, the headings are as follows:

1. Purpose of the District
2. Permitted Uses
3. Permitted Accessory Uses
4. Permitted Signs
5. Height, Area, and Bulk Requirements
6. Reference to Additional Regulations

The height, area, and bulk requirements are set forth in a Table at the end of the zoning districts. Other regulations referred to are off-street parking, off-street loading, regulations for large-scale developments, conditional uses, supplementary height, area, and bulk regulations, and Board of Appeals, exceptions and variances.

Summary

Most of the zoning codes reviewed have clear headings dividing permitted uses, specially permitted uses, and accessory uses permitted in each district or a chart identifying these groupings and referencing specific sections of the code where requirements are listed in detail. Almost all of the codes contain a specific, single home occupations provision; some permit home occupations as of right, while others require special hearings and approval by the zoning board or the legislative body.

Cluster development options are present in about half the ordinances. In the towns of Pittsgrove, New Jersey and Hempstead, New York, cluster residential development is handled by rezoning an entire tract of land; in Rochester, New York, cluster development can be done on a smaller amount of land by Special Permit.

The codes include a variety of ways to reference bulk and area requirements. Some codes include these regulations within each district, some present a separate section and/or chart for all the zoning districts, some do so for all the residential districts.

9. Recommendations

A. Recommendation for Clarity and Conciseness.

- (1) District Names. Descriptive labels for each district, indicating the primary residential use first described and permitted in that residential district, should be used. For simplicity, it is recommended that names similar to those utilized on the zoning district maps be adopted as part of the text of the Zoning Code. (This recommendation applies to all districts, not only residential.) Names on the maps for R-Districts are as follows (paraphrased):

R-1	Single-family Residence District
R-2	Agricultural and Residence District
R-3-SD	Single-family Semi-detached Residence District
R-3-G	Townhouse Residence District
R-3	Garden Apartment Residence District
R-4	Multi-family Residence District

(2) Hierarchy of Districts

Residential districts should be presented in the order of their intensity and density per acre (by highest permitted level of development). Thus, the R-3-G (Townhouse) District should be placed in front of the R-3 Garden Apartment District in the Code, in that it allows as a maximum development row house or townhouse units, which, while attached, are primarily single-family units, and are less intensely developed in units per acre than garden apartment units. The hierarchy of the districts should be as shown in the list in Recommendation (1) above.

- (3) A chart indicating the uses permitted, specially permitted, and conditional uses in each residential district should be developed and included in the Code as a quick reference for developers, staff, and the public. An outline

or model for such a chart is shown in Table 1.

- (4) The use list for each residential district should be divided into permitted uses, special permit uses, conditional uses, and accessory uses, with headings for each category.

TABLE 1. Sample Chart for Residential Uses in New Castle County

	DISTRICT R-1			R-2			R-3-SD			R-3-G			R-3			R-4		
	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S
Single Family detached	X			X			X			X			X			X		
Semi-detached							X			X								
Rowhouses										X								
Conversion of 1-family		X			X													
Garden Apartments													X					
2-family Residence																X		
High-Rise Apartments																X		
Boarding or Rooming House																X		
Churches & Temples	X			X			X			X			X			X		
Schools & Colleges	X			X			X			X			X			X		
Police & Fire Stations	X			X			X			X			X			X		
Libraries & Museums	X			X			X			X			X			X		
Agriculture	X			X			X			X			X			X		
Professional Home Occupation		X			X			X			X			X			X	
Customary Home Occupation		X						X			X			X			X	
Home Service Business		X						X			X			X			X	
Dormitories																	X	
Offices																	X	
Public Park, Play-ground	X			X			X			X			X				X	
Water Towers, Reservoir	X			X			X			X			X				X	
Sewage Treatment Plant	X			X			X			X			X				X	
Electric/Gas Substation			X			X			X			X			X			X
Telephone Central Office			X			X			X			X			X			X
Country Club/Golf Course		X			X			X			X			X			X	
Day Care/Nursery School		X			X			X			X			X			X	
Nursing Home/Rest Home		X			X			X			X			X			X	
Swimming Pool/Club	X			X			X			X			X				X	
Public Forest/Game Preserve	X			X			X			X			X				X	
Utility Lines	X			X			X			X			X				X	
Rights-of-way	X			X			X			X			X				X	
Petroleum Storage (Accessory)	X			X			X			X			X				X	
Temporary Building	X	X		X	X		X	X		X	X		X	X		X	X	
Accessory Uses & Buildings	X			X			X			X			X				X	
Accessory Riding Stable	X				X			X			X			X			X	

KEY: P = Permitted Use
C = Conditional Use (or conditions attached)
S = Special Permit (Special Exception) Use

B. Recommendations for Flexibility and Site Planning Goals

- (1) A Cluster Development option, similar in intent to that of the Pittsgrove, New Jersey Code, should be introduced in the Code for the smaller-lot single-family districts (R-1-B, R-1-CC, R-1-C and R-2) and the semi-detached and townhouse districts (R-3-SD, R-3-G), allowing the development of zero-lot-line structures, cluster development (reduced lot size for individually owned units, with common open spaces for recreational, ecological and topographic conservation purposes, maintained by a mandated homeowner's association), and similar concepts for developments of 10 acres or more, at gross densities within the limits of each district. The optional development approach should be reviewed by the Subdivision Advisory Committee and require approval of the Department of Planning prior to application for permits and issuance of certificates by the Department of Development and Licensing.
- (2) Mother/daughter residences, "granny flats", "elder cottages", and other arrangements for extended family use on a single lot where the additional dwelling unit would be clearly secondary in size and purpose to the principal single-family use should be included as a Special Permit (Special Exception) use in the single-family districts with lot sizes of 10,000 sq. ft. or more. The use of trailer homes should be avoided.
- (3) Density bonuses for provision of desired amenities should be considered. Among the amenities for which bonuses could be granted are:
 1. Provision of publicly accessible open space.
 2. Retention of natural amenities such as streams, ponds, wetlands, rock outcroppings, woodlands, and wildlife breeding areas.
 3. Provision of covered parking.
 4. Addition of large scale plant material.
 5. Community facilities such as meeting rooms, recreational facilities, space for offices of non-profit groups.
 6. Provision of low- and moderate-income housing units.
- (4) A review of all non-residential uses and accessory uses which are permitted as of right in the residential districts should be undertaken. The purpose of this review would be to consider whether each use might best be treated as a Special Permit (Special Exception) use, or whether specific conditions as to the placement, design, screening, or hours of operation should be added to the Code to assure compatibility with adjacent residences.

References

Cost-Effective Site Planning by Land Design/Research Inc. for the National Association of House Builders, Washington, D.C., 1976.

Residential Development Handbook, Urban Land Institute, Washington, D.C., 1978.

"Single-Family Housing Conversions: A Strategy for Increasing the Housing Supply", Edward Connelly, Journal of Housing, National Association of Housing and Redevelopment Officials, March/April 1982.

"Why Granny Flats Are a Good Idea", Patrick H. Hare, Planning magazine, American Planning Association, Chicago, Illinois, February 1982.

"Zero Lot Lines Can Trim Housing Costs", Welford Sanders, Planning magazine,
April 1982.

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ARTICLE III - SUPPLEMENTARY DISTRICT REGULATIONS

Section 3.7 Cluster Development Option

The purpose of this Section is to permit a more flexible pattern of development in the Low Density Residential (LR2) district, the Agricultural-Residential (AR) district, and the Rural Residential (RR) district. The zoning districts are only appropriate for significant development if the prevailing natural resources and environmental characteristics are carefully considered. An application for cluster development shall be reviewed in accordance with the subdivision review procedures and design standards as well as the standards listed in this Section.

- A. Parcel Size. The minimum parcel size to be considered for cluster development shall result in the creation of not less than thirty (30) building lots in the LR2 district and in the A-R district and not less than forty lots in the RR district.
- B. Density. The maximum number of lots per gross acre for any cluster development shall be 1.1 in the LR district and .9 in the A-R district, and .5 in the RR district.
- C. Lot requirements
 - 1. The lot area, dimensional, and yard requirements for cluster developments are reduced as shown on the Schedule of District Regulations.
 - 2. Whenever a lot in a cluster development abuts a lot outside a cluster development, the conventional yard requirement for the zoning district shall be maintained so as to provide an abutting yard of the same size.
- D. Buildable lots. In addition to the requirements of the subdivision ordinance, an application for cluster development must demonstrate the adequacy of on-lot water supply and sewage disposal facilities to the County Board of Health, Township Planning Board, Township Engineer, and the Soil Conservation District particularly during the wet season. A percolation test shall be provided in the general location of each proposed disposal system. When necessary, common open space areas may be utilized to help support adequate on-site sewage disposal facilities for an adjacent lot.

SAMPLE CLUSTER ORDINANCE

Open space areas. The open space areas conserved by clustering shall meet the following requirements:

1. Open space equal to not less than 25% of the gross acreage of the tract shall be set aside for conservation, open space, and recreation purposes. Land utilized for buffer strips shall not be included in the above open space requirement calculation.
2. Open space areas shall be contiguous and, whenever possible, should be concentrated in one portion of the tract.
3. Areas adjacent to lakes, natural streams, and other important natural features shall be devoted to open space at least within fifty (50) feet of the natural feature.
4. Whenever possible, open space areas of adjacent cluster developments shall be linked.
5. At least fifty percent (50%) of the required open space shall be located outside of waterbodies, floodplains, wetlands, or steep slopes and shall be deemed suitable for recreation purposes by the Planning Board. Fully improved active recreation areas shall at a minimum be provided in this area at the ration of three hundred (300) square feet per dwelling unit including one or more of the following recreational facilities: swimming pools, tennis courts, basketball courts, pavilions, or indoor recreation clubs or facilities. The use of facilities other than those listed to meet the active recreation facility requirement shall only be permitted with the approval of the Planning Board. The remaining useable open space shall be devoted to playfields, playgrounds, golf courses and other land intensive recreational purposes.
6. The remaining portion of the required open space shall be permanently devoted to parks, woodland conservation areas, wildlife refuges, walkways or bikeways, bridal paths, watershed protection areas, or flood control areas.
7. Open space shall be dedicated by deed and shall be used for private recreation purposes as approved by the Planning Board.
8. Open space buildings and facilities shall be located a minimum of fifty (50) feet from any adjoining lot, in or outside the cluster development and screening, landscaping, or other buffering measures may be required.
9. Provisions made within any cluster development for open space and recreational areas shall be reviewed, found adequate, and approved by the Planning Board. In its review, the Planning Board shall consider the size and configuration of parcels devoted to open space and recreational areas, their location within the project, the topography, the uses contemplated upon such open space and recreation areas, facilities and improvements to be provided, the provisions made for maintenance and access, the environmental impacts of open space development, and the staging or timing of the open space area and recreational facility development. The provisions shall be deemed adequate if the Planning Board determines that:
 - a. Portions of the open space and recreational area are readily accessible to all residential dwelling units.
 - b. The uses being designated for open space and recreation areas are

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reasonably related to and appropriate and sufficient to meet the needs of the project's residents for a variety of uses appealing to all socioeconomic levels and age groups.

c. The uses being designated for open space and recreational areas will be functional upon the arrival of a sufficient number of residents who will use them.

d. The topography of the land is suitable for the uses contemplated and the uses will not be detrimental to the ecology of the area.

e. The restrictions, covenants, or other legal devices designed to preserve and to confine open space and recreational areas for the uses initially proposed are adequate. Any procedure to allow changes in the uses provided over time must be approved by the Planning Board.

10. While nothing herein contained shall be deemed to require that as a condition of cluster development project approval, a developer must dedicate or make available common open space for public use, the Township may, at any time and from time to time, accept the dedication of land or any interest therein for public use and acceptance.

11. The developer shall provide for an organization for the ownership and maintenance of the common open space for the benefits of owners or residents of the development. Such association shall be in accordance with the following standards:

a. The method and organizational structure for ownership and management of the open space shall be clearly set forth at the time of application and be subject to the approval of the Planning Board and the Township Solicitor.

b. Membership in any created homeowners association by all residents of the development shall be mandatory. Such required membership in any created homeowners association and the responsibilities upon the members shall be in writing between the association and the individual in the form of a covenant with each member agreeing to his liability for his pro rata share of the association's costs and providing that the Township shall be a party beneficiary to such covenant to enforce its provisions. When the ownership of the land is transferred from the landowner to the homeowner association, the land shall be free and clear of all encumbrances other than those imposed under the conditions of preliminary approval.

c. Such association shall not be dissolved and shall not dispose of any open space or recreational area by sale or otherwise except to an organization conceived and established to own and maintain open space and recreational area for the benefit of such development, and thereafter such organization shall not be dissolved or dispose of any of its open space or recreational area without first offering to dedicate the same to the Township or other public agency designated by the Township.

d. The homeowners association shall be responsible for liability insurance, local taxes, and maintenance of land and any facilities that may be erected on any land deeded to the homeowners association and shall hold the Township harmless from any liability.

e. The landowner or developer shall be required to make full disclosure of the details of any proposed homeowners association designated to own and maintain open space and recreational areas within a cluster development project, including presentation and explanation of all articles of incorporation, bylaws, deeds of trust, restrictions and covenants which relate to the organization's operations prior to preliminary approval.

f. The applicant or developer shall submit such information as will permit the Planning Board to make detailed findings concerning the ability of the association to adequately perform the function for which it is designed. On the basis of this information submitted by the applicant or developer, the Planning Board shall determine whether or not the provisions made for the following are adequate:

- (1) Time when association is to be created in relation to the project's development timetable.
- (2) Mandatory or automatic nature of membership in the organization by a resident and his/her successor (s).
- (3) Permanence of open space and recreational area safeguards.
- (4) Liability of organization for insurance, taxes, and maintenance of all facilities.
- (5) Provisions made for pro rata sharing of costs and assessments
- (6) Capacity of the organization to administer common facilities and preserve the benefits of the open space and recreational area.
- (7) The restrictions, covenants and other devices establishing automatic membership in the association and the responsibilities of that membership.

g. In the event that the association or organization established to own and maintain open space and recreational areas, or any successor organization, shall at any time after the establishment of the cluster development fail to maintain the open space and recreational areas in reasonable order and condition in accordance with the approved plan, the Township or its duly appointed officer may serve written notice upon such association or upon the residents and owners of the cluster development, setting forth the manner in which the association has failed to maintain the open space and recreational area in reasonable condition, and said notice shall include a demand that such deficiencies of maintenance be cured within thirty-five (35) days thereof and shall state the date and place of a hearing thereon, which shall be held within fifteen (15) days of the notice. At such hearing, the Township Committee or its officer may modify the terms of the original notice as to the deficiencies and may give an extension of time, not to exceed sixty-five (65) days.

- (1) If the deficiencies set forth in the original notice or in the modification thereof shall not be cured within said thirty-five (35) days or any extension thereof, the municipality, in order to preserve the open space and recreational area may enter upon said open space recreational area and maintain the same for

a period of one (1) year. Said entry and maintenance shall not vent in the public any rights to use the open space and recreational area except when the same is voluntarily dedicated to the public by the residents and owners.

(2) Before expiration of said year, the Township shall, upon its initiative or upon the request of the association or organization theretofore responsible for the maintenance of the open space and recreational area, call a public hearing upon fifteen (15) day's written notice to such association or organization and to the residents and owners of the cluster development project, to be held by the Township Committee, at which hearing such association or organization and the residents and owners of the cluster development project shall show cause why such maintenance by the Township shall not, at the election of the Township, continue for a succeeding year.

(3) If the Township Committee shall determine such association or organization is ready and able to maintain said open space and recreational area in reasonable condition, the Township shall cease to maintain said open space and recreational area at the end of said year. If the Township Committee is not ready and able to maintain said open space and recreational area in a reasonable condition, the Township may, in its discretion, continue to maintain said open space and recreational area during the next succeeding year, subject to a similar hearing and determination each year thereafter. The decision of the Township Committee in such case shall constitute a final administrative decision subject to judicial review.

(4) The cost of such maintenance by the Township shall be assessed pro rata against the properties within the cluster development project that have a right of enjoyment of the open space and recreational areas, in accordance with assessed value at the time of imposition of the lien, and shall become a lien and tax on said properties and be added to and be a part of the taxes to be levied and assessed thereon, and shall be enforced and collected with interest by the same officers and in the same manner as other taxes.

F. Environmental Design Considerations

1. Every effort shall be made to either preserve the landscape in its natural state or to improve existing site conditions in keeping with adjacent areas.
2. The cluster development application shall provide adequate landscaped buffer areas to screen the development from existing roads and from adjacent properties.
3. Whenever possible, excessive cut or fill should be avoided, floodplains respected and, where necessary incorporation in the design of erosion control measures including terracing, stilling ponds, surface water retention measures or, grassed slopes and swales. If major changes are necessary in the contour of the land, a grading plan shall be submitted to the Planning Board.

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4. The orientation and siting of the building lots shall take into account the unique characteristics of the site and seek to create a desirable focal point, preserve natural views, utilize natural buffers or micro-climatic factors, and respect the established character of the surrounding area.

5. Planning Board findings. Prior to the approval of a cluster development application, the Planning Board shall find the following facts and conclusions:

1. That departures by the proposed development from zoning regulations otherwise applicable to the subject property conform to the zoning ordinance;

2. That the proposals for maintenance and conservation of the common open space are reliable and the amount, location, and purpose of the common open space are adequate;

3. That provision through the physical design of the proposed development for public services, control over vehicular and pedestrian traffic and the amenities of light and air, recreation and visual enjoyment are adequate.

4. That the proposed cluster development will not have an adverse impact upon the area in which it is proposed to be established.

5. In the case of a proposed development which contemplates construction over a period of years, that the terms and conditions intended to protect the interests of the public and of the proposed development in the total completion of the development are adequate.

Section 3.8 Flood Hazard Areas

The specific purpose and intent of this section is to prevent excessive and unsafe development in areas deemed unfit by reason of flood danger, to prevent unsanitary conditions and related hazards, to minimize danger to public health by protecting water supplies, recharge areas and the natural drainage system; and to promote the health, safety and welfare of the residents of Pittsgrove Township and property owners in or near streams or areas subject to flooding.

A. Floodplain designation. There are hereby designated within the Township of Pittsgrove floodplain areas comprised of those sections of the Township which are shown on the Map designated as the Pittsgrove Township floodplain map which is hereby made a part of this Ordinance.

1. Map filing. For purpose of defining the application of the Floodplain area map to any specific area, the maps, data and other source material utilized to establish, define, and designate floodplain areas shall be kept on file in the Township Engineers office and shall be proof of the intended limits of the floodplain areas.

2. Floodway. Within the floodplain areas described above, there are hereby designated floodways as defined in this Ordinance.

3. Amendment. Any changes in the floodplain map may be recommended by the Township Engineer based upon a proper survey and upstream drainage calculations or as a result of an acceptable engineering delineation by an outside agency. The Township Committee may consider these recommendations for proper enactment as an amendment of this Ordinance.

USE REGULATIONS

ZONE	PERMITTED USES	CONDITIONAL USES
A	<p>A. Principal Uses</p> <ol style="list-style-type: none"> 1. Principal Uses Permitted by right in "CONS" district 2. General purpose agriculture 3. Kennels, Animal Hospitals, Commercial Stables and Riding Academies (per Section 3.24) 4. Public educational, civic, or cultural uses <p>B. Accessory Uses</p> <ol style="list-style-type: none"> 1. Accessory uses permitted by right in CONS district 2. Any use customarily incidental to general purpose agriculture including: <ol style="list-style-type: none"> a. Roadside Stand (per Section 3.16) 	<ol style="list-style-type: none"> 1. Any use permitted as a Conditional Use in "CONS" district 2. Multi-family migrant labor housing (per Section 3.25) 3. Churches, chapels, and parish houses 4. Intensive fowl or livestock farms (per Section 3.19) 5. Land mining operations (per Section 3.20) 6. Sanitary landfill (per Section 3.21) 7. Basic Utility Airport 8. Agricultural Fairgrounds
A-R	<p>A. Principal Uses:</p> <ol style="list-style-type: none"> 1. Any use permitted by right in "CONS" of "A" district 2. Cluster development (per Section 3.7) <p>B. Accessory Uses</p> <ol style="list-style-type: none"> 1. Accessory Uses permitted by right in "CONS" or "A" district 	<ol style="list-style-type: none"> 1. Any use permitted as a conditional use in "CONS" or "A" districts 2. Public or non-profit swimming clubs 3. Tennis Clubs
LR-1	<p>A. Principal Uses</p> <ol style="list-style-type: none"> 1. Any use permitted by right in "RR" district except commercial stables, riding academies, kennels, animal hospitals, or forestry 2. Churches, Chapels, Parish houses <p>B. Accessory Uses</p> <ol style="list-style-type: none"> 1. Accessory uses permitted by right in "RR" district 	<ol style="list-style-type: none"> 1. Any use permitted as a conditional use in "RR" district except Land mining operations, sanitary landfills, campgrounds, hunting, trapping or skeet clubs, fairgrounds, airports, mobile home parks, or migrant labor housing 2. Funeral home 3. Kennels, Animal hospitals, commercial stables, and riding academies (per Section 3.24) 4. cemeteries
LR-2	<p>A. Principal Uses</p> <ol style="list-style-type: none"> 1. Any use permitted by right in "LR-1" district 2. Cluster development (per Section 3.7) <p>B. Accessory Uses</p> <ol style="list-style-type: none"> 1. Accessory use permitted by right in "LR-1" district 	<ol style="list-style-type: none"> 1. Tennis clubs 2. Public or private swimming clubs (per Section 3.26) 3. Funeral home 4. Kennel or animal hospitals (per Section 3.24) 5. Commercial recreation clubs, lodges, and assembly halls

PITTSBURGH TOWNSHIP ZONING ORDINANCE
SCHEDULE OF DISTRICT REGULATIONS
USE REGULATIONS

ZONE

PERMITTED USES

In each district, only the uses listed below shall be permitted by right. All uses in the following list other than detached single family dwellings, general purpose agriculture, and normally incidental accessory uses thereto, shall be subject to Site Plan Review requirements in addition to complying with all other applicable requirements

CONDITIONAL USES

All uses listed below and normally incidental accessory uses thereto may only be permitted in accordance with Conditional Use Review procedures as well as Site Plan Review requirements.

CONS

A. Principal Uses:

1. Water, forest, or wildlife conservation areas and uses.
2. Parks, playgrounds, playfields and similar open land uses.
3. Forestry (per Section 3.29)
4. Essential Services
5. Single family dwellings

B. Accessory Uses

1. Any use customarily incidental to a permitted principal use including:
 - a. Swimming pools (per Section 3.13)
 - b. Signs (per Section 3.9)
 - c. Fences, walls, and hedges (per Section 3.10)
 - d. Off-street parking areas (per Section 3.14)
 - e. Off-street loading areas (per Section 3.14)
 - f. Yard sales
 - g. Home occupation (per Section 3.15)

RR

A. Principal Uses

1. Any use permitted by right in "A-R" district except cluster development

B. Accessory Uses

1. Accessory uses permitted by right in "A-R" districts

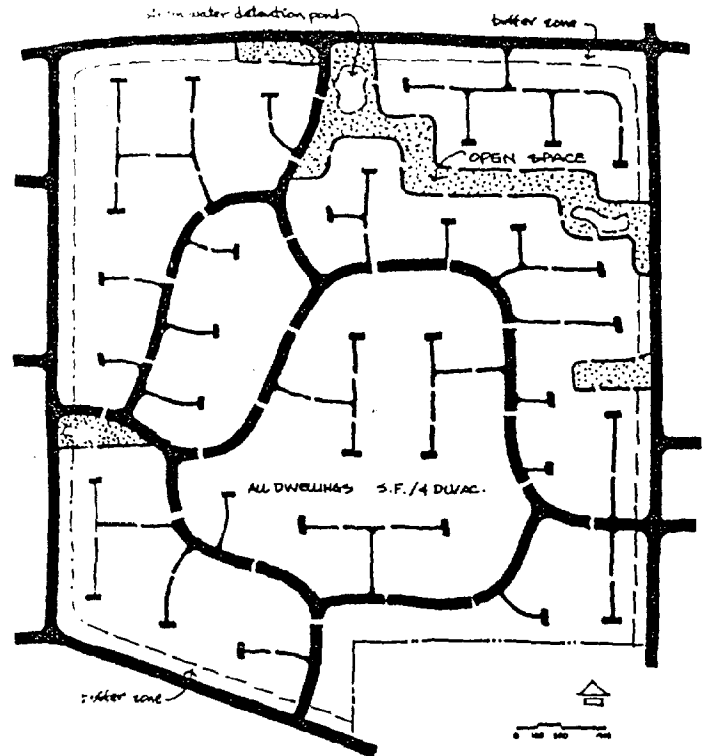
1. Any use permitted as a conditional use in "A-R" district
2. Banks, professional offices, theaters, restaurants
3. Commercial recreation clubs, lodges and assembly halls
4. Hospital, auxiliary extended health care facilities, nursing homes
5. Mobile home parks (per Section 3.30)
6. Public utility use (per Section 3.23)
7. Golf clubs
8. Cluster development (per Section 3.7)

CLUSTER vs CONVENTIONAL

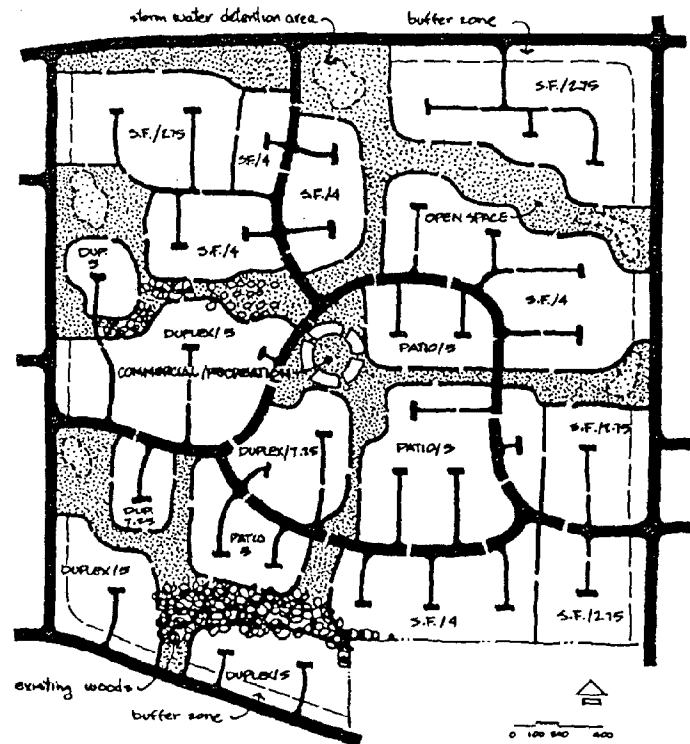
This portion of the workbook applies to many of the site planning principles and standards illustrated in previous chapters. Most comparisons of cluster and conventional housing projects focus on the use of multi-family housing and increasing the total number of units to point out aesthetic and economic differences. Many of the design concepts presented in this workbook have been challenged in the past because they were related to proposals for increasing overall densities on a given tract of land. We have taken great care in laying out our comparative neighborhood plans to use only single-family housing types *and* to maintain a constant density. This is not to say that increased density via clustering may not be appropriate. In many circumstances it may be the only way to provide wider housing choice at lower cost. However, the concept is beyond the scope of this study.

The Site — The 166 acre site, located on the outskirts of Canton, Ohio, is relatively flat, surrounded by half-acre, quarter-acre and estate sized lots. Access is available from all four sides of the site which is well served by all utilities. The land is zoned for a maximum density of three (3) dwellings per acre on buildable land. The land classified as unbuildable (approximately 8.6 acres) is primarily flood plain and steep slopes. The maximum yield allowed is 472 dwellings on approximately 157 acres.

The site is basically a moderately-sloped meadow with several low wet areas and two higher wooded areas. It is dominated by a prominent open hill, accented by a mature orchard. The Summary Analysis drawing highlights these points, as well as other important considerations. The storm water drainage arrows indicate the obvious locations for future storm water detention areas.



CONVENTIONAL PLAN
CONCEPT



CONVENTIONAL PLAN

An attempt was made to relate the street network to the topography in order to minimize grading costs. In addition, many short cul-de-sacs were planned in lieu of the prevalent curvilinear street pattern. The opportunity to create some sense of privacy and the popularity of cul-de-sacs with home buyers were the prime factors that guided the development of this plan. While many houses front directly on the collector streets in order to produce an efficient plan, this practice is neither desirable nor recommended. The general living environment on a residential collector street is often diminished by higher traffic volumes and faster vehicle speeds.

Housing groups are arranged in a rectangular pattern to maximize land utilization and to provide a visual sense of order. Interest in the streetscape is achieved by curving the roads throughout these rectangular arrangements.

Sidewalks are located on both sides of the collector streets and on only one side of the cul-de-sacs and eye brows. The land-consuming nature of this plan provides few opportunities for visual relief, recreational facilities, and management of a "natural" storm water system.

Only six percent (6%) of the site is allocated to open space and an additional eight percent (8%) of the site is needed for major streets (cluster plan uses 4% of the site for major streets).

There are few opportunities to create separate or contrasting identity areas in the neighborhood. This lack of "natural" separation makes it difficult to provide architectural and economic diversity in planning the housing types.

Conventional Neighborhood Plan

Major Land Use

Residential	156.59 acres*	94% of 166 acres
Open Space	9.41 acres**	6% of 166 acres

* Approximately 7 acres of the residential land is used as buffer strip along the perimeter roads.

** The 9.41 acres include the minimum requirement for the flood plain. An additional 0.61 acres were allocated for storm water management.

Residential Program

Single-family detached — minimum lot size 8,000 S.F.

472 dwelling units on 156.59 acres

Average Net Density — 3.01 DU/AC

Street Standards

Collector/Subcollector 60' R.O.W.* 36' Pavement

Minor Streets/Cul-de-sac 50' R.O.W. 30' Pavement

Curbs and gutters

* A portion of the collector street (1040 L.F.) is shown as a 70' R.O.W. w/44' pavement.

Total Roads	25,781 L.F.
L.F. Road/DU	55 L.F.

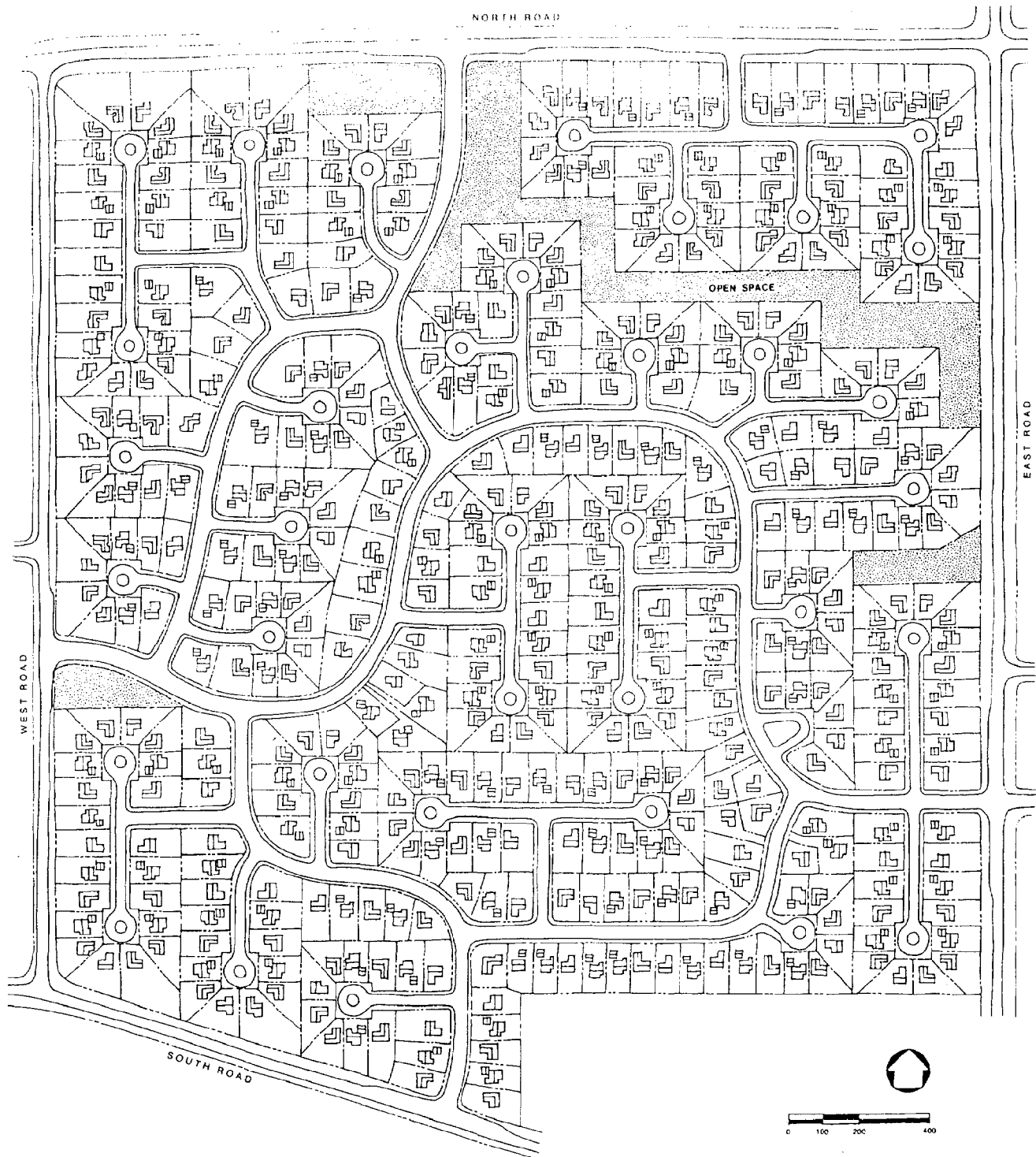
Total Curb/Gutter	48,208 L.F.
L.F. Curb/Gutter/DU	102 L.F.

Total Road Pavement	837,970 S.F.
S.F. Pavement/DU	1,775 S.F.

Total Storm Sewer	15,250 L.F.
L.F. Storm Sewer/DU	32 L.F.

Total Water	31,668 L.F.
L.F. Water/DU	67 L.F.

Total Sanitary Sewer	40,755 L.F.
L.F. Sanitary/DU	86 L.F.



ALL DWELLING UNITS
SINGLE FAMILY 4 DU/AC

CONVENTIONAL NEIGHBORHOOD

1-A-11

CLUSTER PLAN

At first glance, the layout of the collector streets in the cluster neighborhood appears to be similar to the conventional neighborhood. However, there are significant differences. An effort was made to reduce the total lineal feet of collector streets to discourage unnecessary through traffic and minimize the amount of land devoted to wider streets and wider R.O.W.s. In addition, no housing units front directly on collector/sub-collector streets.

All major wooded and orchard areas were either designated as open space or for low density housing in order to preserve the maximum number of trees. Most of the natural drainage channels are designated as open space to minimize grading and sodding costs. All existing low areas were retained to function as storm water detention areas.

The cluster plan's housing diversity allowed placement of half-acre and larger sized lots on the perimeter of the project, adjacent to existing large homes and lots. Key features of the cluster neighborhood that contribute to reduction in site development costs are:

1. **Smaller lots create open space.** Open space affords the opportunity to channelize and detain storm water through the use of grass lined swales and ponding areas. This approach to storm water management can eliminate and/or reduce the need for curbs and gutters, inlets, headwalls and pipes. It also minimizes flooding downstream from the project area, with potential additional off-site development costs.
2. **Narrower lots reduce the front footage of lots.** Smaller lots can reduce the lineal feet of roads, curbing, utilities and walks which in turn reduces site development costs. The conventional plan also utilized the narrow lot configuration to reduce lot frontage.
3. **Reduced street and R.O.W. standards.** These are not intended to reduce the quality of the project, but to reduce site development costs, reduce excessive land devoted to R.O.W., conserve construction material, and to provide a more pleasant "street environment".

Why bother with non-residential uses such as commercial and recreation? These neighborhoods serve a population of 1,200-1,400 residents

that are the base necessary to support convenience commercial and recreational facilities such as a swimming pool, tennis courts and ball fields. When a residential project is large enough to justify local commercial space the developer should have the opportunity to provide space for such a facility. The sale of an acre of commercial land can be used to reduce the cost of producing housing or pay for recreational facilities.

The recreational facilities are not essential to the success of the cluster neighborhood. However, the convenience and cost of modest facilities could produce better marketing results than a major advertising program.

A check list of major items that differentiate the cluster plan from the conventional plan are:

1. reduction of street and R.O.W. standards;
2. reduction of minimum lot size to 4,000 S.F.;
3. use of a more natural storm water management approach;
4. provision of a greater mix of unit types and income levels;
5. provision of 20% of the site in open space; and
6. provision of compatible non-residential land uses.

Cluster Neighborhood Plan

Residential	131.4 acres*	79.2% of 166 acres
Commercial	1.0 acres	0.6% of 166 acres
Open Space	33.6 acres**	20.2% of 166 acres

* Approximately 6.6 acres of the residential land will be used to provide a buffer strip along perimeter roads.

** The 33.6 acres include the minimum requirement for the flood plain, recreational facilities (swimming pool and tennis courts are illustrated) pedestrian circulation, and additional land for storm water detention and channelization.

Residential Program

Unit Type	(Minimum Lot Size — 4,000 S.F.)	Acres	Units	Net Density
2.75	Single-family Detached	33.05*	80	2.42
4.00	Single-family Detached	39.57*	147	3.71
5.00	Single-family Patio	19.62	93	4.74
5.00	Single-family Duplex	23.69*	100	4.22
7.25	Single-family Duplex	8.21	52	6.33
		124.14	472	3.80
Collector/Subcollector Streets		7.26	Avg. Net	
Total Acres		131.40	Density	3.59

* Residential acres include 50' buffer strip which totals 6.66 acres.

Street Standards

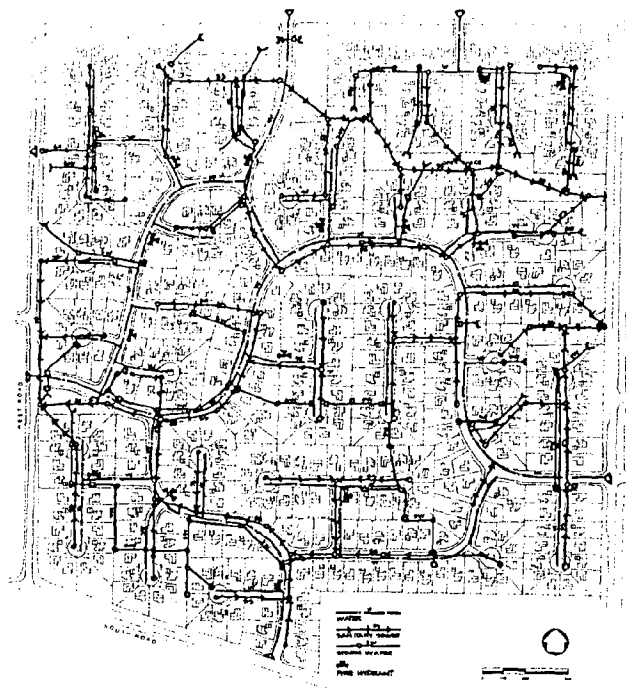
Collector/Subcollector Streets	40' R.O.W.**	26' Pavement
Minor Streets/Cul-de-sacs	28' R.O.W.	20' Pavement
No curbs and gutters		

** Small segment of collector street (600'±) at 60' R.O.W., 44' pavement.

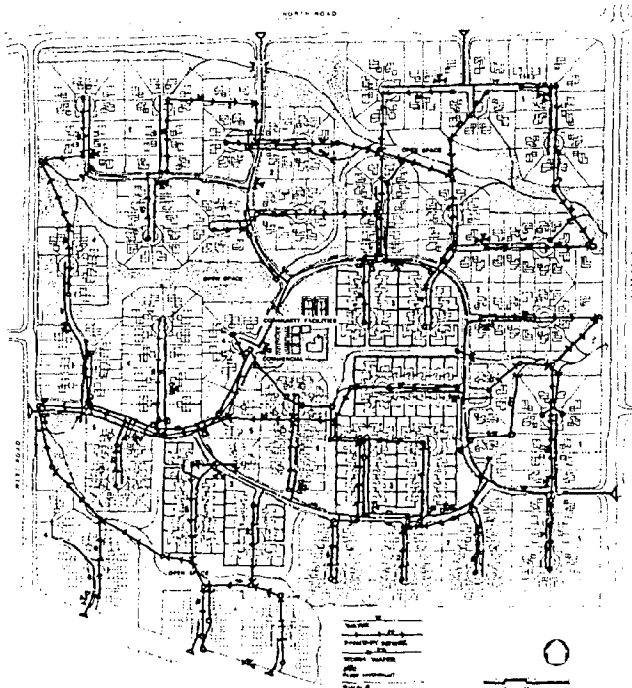


- 1 SINGLE FAMILY 2.75 DU/AC
- 2 SINGLE FAMILY 4.0 DU/AC
- 3 ZERO LOT LINE 5.0 DU/AC
- 4 DUPLEX 5.0 DU/AC
- 5 DUPLEX 7.25 DU/AC

CLUSTER NEIGHBORHOOD



**CONVENTIONAL PLAN
UTILITIES**



**CLUSTER PLAN
UTILITIES**

SUMMARY

Cluster vs Conventional

1. **Management Requirements:** We would be remiss if we ignored the obvious: the planning, development, construction and marketing of the cluster plan requires more experience and business judgment than the conventional approach. The potential savings indicated by our examples will only be realized through attention to detail and the correct assessment of local consumer patterns. But this is — or should be — true of any successful business venture.
2. **The Pre-Development Period:** Assuming the availability of utilities, most builders would expect to process their zoning application (if required) and subdivision plats for the conventional plan in reasonably short order. Unless the local governing body had already adopted flexible controls the cluster plan could meet substantial resistance and time delays. That's why we stressed the need to mount an organized effort to push for sound development regulations at the local level.
3. **Public Support:** Regardless of adherence to public policy, many proposed subdivisions meet strenuous and often successful opposition from adjacent residents and citizens groups. Their arguments often center on two issues; small lots on project boundary roads and higher densities than those existing in the immediate area. As we've shown, the cluster plan offers the ability to "buffer" adjacent parcels with large lots without sacrificing the maximum allowable yield. And remember, the overall density is the same for both plans. This is not a device to increase the number of houses in a given region.
4. **Variety in Housing Product:** The conventional scheme offers one basic housing environment. There are no logical sub-areas within the project allowing for an appropriate mixing of house size, architectural style or sales price. The cluster plan offers at least ten different building areas where distinctive products can be offered. Even if there is a need to maintain a narrow price range throughout, the opportunities to provide choice in floor plans, styles, external and internal features etc., are enormous.

SUMMARY OF SITE DEVELOPMENT COSTS

	CONVENTIONAL		CLUSTER	
	Total Costs	Costs/DU	Total Costs	Costs/DU
Street Pavement	\$ 392,379	\$ 831	\$ 246,048	\$ 521
Curbs & Gutters	\$ 351,918	\$ 746	—	—
Street Trees	\$ 206,248	\$ 437	\$ 187,320	\$ 397
Driveways	\$ 330,400	\$ 700	\$ 254,540	\$ 539
Storm Drainage	\$ 310,950	\$ 659	\$ 179,950	\$ 381
Water Distribution	\$ 293,208	\$ 621	\$ 244,694	\$ 518
Sanitary Sewer	\$ 459,462	\$ 973	\$ 403,419	\$ 855
Grading	\$ 258,986	\$ 549	\$ 167,740	\$ 355
Clearing and Grubbing	\$ 118,200	\$ 250	\$ 82,800	\$ 175
Sidewalks	\$ 124,000	\$ 263	\$ 117,200	\$ 248
Subtotal	\$2,845,751	\$6,029	\$1,883,711	\$3,991
Engineering Fees (5.6%)	\$ 159,362	\$ 338	(5.8%) \$ 109,255	\$ 231
Total	\$3,005,113	\$6,367	\$1,992,966	\$4,222

Actual difference
on a per lot basis

\$2145

% of conventional
lot cost

100%

66%

5. **Marketing Package:** The key to selling new homes is generating traffic through your project and models. That happens through advertising, general promotion, and particularly for larger projects, word-of-mouth recommendations. The conventional plan offers a conventional message. It is distinguished only by the quality of construction and its surrounding neighborhood. The cluster plan starts at that point and expands into such marketing benefits as "community", "lifestyle", "outdoor living", "amenity packages", "recreation programs", and beyond depending on the developer's imagination and program. A Sunday visit by a prospective buyer can be turned into an afternoon of exploring a host of housing choices, walking a path system and envisioning a full living experience for his family.

6. **Competitive Pricing:** Every buyer eventually puts aside his dreams and looks hard at the bottom line; how much house for his available resources? We've shown savings of \$2,100 or more per lot using the cluster plan in conjunction with reduced road standards. That's about the cost of a 85 square feet of additional finished living space; or a fireplace plus finished family room; or a full garage. List the most desired housing features in your area and you'll find that extra \$2,100 can yield a real competitive edge. Or use it to reduce closing costs or as a straight markdown on the sales price.

STATISTICAL COMPARISON OF THE CONVENTIONAL AND CLUSTER NEIGHBORHOOD PLANS

	CONVENTIONAL	CLUSTER
Number of units	472	472
Minimum lot size	8,000 S.F.	4,000 S.F.
Residential land area	156.59 acres	131.40 acres
Commercial land area	0 acres	1.0 acres
Open Space land area	9.41 acres (6% of 166 ac.)	33.6 acres (20.2%)
Collector Street R.O.W. included in residential land area acreage	13.14 acres (8% of 166 ac.)	7.26 acres (4%)
Total Roads	25,781 L.F.	23,415 L.F.
L.F. Road/DU	55 L.F.	50 L.F.
Total Curb/Gutter	48,208 L.F.	—
L.F. Curb/Gutter/DU	102 L.F.	—
Total Road Pavement	837,970 S.F.	525,570 S.F.
S.F. Pavement/DU	1,775 S.F.	1,113 S.F.
Total Storm Sewer	15,250 L.F.	7,040 L.F.
L.F. Storm Sewer/DU	32 L.F.	15 L.F.
Total Water	31,668 L.F.	25,599 L.F.
L.F. Water/DU	67 L.F.	54 L.F.
Total Sanitary Sewer	40,755 L.F.	33,874 L.F.
L.F. Sanitary/DU	86 L.F.	72 L.F.

(see pages 142-143 for detail cost information)

1-A-15

7. **Operation and Maintenance:** The common owned open space areas and any use of these areas should be managed by a homeowners' association. The covenants and restrictions that guide the homeowners must be established by the developer before houses are sold. The costs of managing and maintaining the common open space should be by assessment of all property owners within the project. It could be argued that the cluster plan can cost more than the conventional plan to maintain their respective open space areas. It is possible in the cluster plan to designate large areas as natural or semi-natural (storm water detention ponds) uses that require little or no maintenance. In addition, maintenance of the much larger lots (up to a 100% larger) in the conventional plan requires more costs in terms of energy and dollars than the cluster plan. A good management plan for the cluster neighborhood can produce costs that on a per unit basis are equal to that of the conventional neighborhood.

Maintenance costs of recreational facilities such as swimming pool and several tennis courts will cost more; however, these costs should be reflected in terms of the recreational needs and requirements of the community at large. If they exceed the normal user fees that exist in the area, it may be best not to provide these facilities.

Long Term Financial Implications

The economic advantages of the cluster plan become increasingly important to the developer/ builder when he tackles a project of several hundred units or more. These advantages stem from two conditions associated with the cluster approach:

1. A faster pace of sales given reduced development costs (assumes savings are passed on to home buyer) and a broader range of product on the market.
2. Lower per-lot construction costs requiring less front-end investment to "open up" new sections of the subdivision.

We have prepared a cash flow model for each plan to illustrate these differences. The model for the conventional plan serves as the base against which the cluster model can be compared. We assumed a 7 year sales period for the conventional plan or just under 70 units per year. We accelerated this pace to a 6 year program or around 80 units per year for the cluster plan. (We believe this is a conservative estimate of increased sales if the full savings from lot improvements are passed on to the consumer.)

All other inputs to the models are held constant between them, i.e., acquisition costs, pre-development costs, interest rates, and the net proceeds per lot. The results are interesting:

1. The overall savings in interest costs are \$74,000 or \$157 per lot. Since these savings are realized over time they would not be used to reduce lot sales prices but, rather, result in increased profit to the developer. They represent a 8% increase in profits.
2. The maximum debt position, which occurs in the second year in both projects, is reduced by \$39,000. Put another way, the developer/ builder can afford to expend additional funds in the planning phase to create a better product and sell it to local officials, without materially affecting his borrowing position.

3. Debt is retired much faster in the cluster model. In the fourth year the debt position of the cluster project is half that of the conventional approach. Total debt retirement occurs more than one year earlier in the cluster program.
4. It is also clear from the models that the cluster approach can better withstand fluctuations in the housing market than can the conventional project. With lower debt throughout and smaller cost increments to finish each section there is a far greater "cushion" available for riding out tight mortgage markets.

CONVENTIONAL PLAN									
	\$/000 (Deficit)								
Development Year	1	2	3	4	5	6	7	8	Totals
No. Lots Developed	—	40	60	80	100	100	92	—	472
Development Costs \$6,367/Lot	—	255	382	509	637	637	586	—	3,006
No. of Lots Sold	—	20	50	70	90	100	96	46	472
Proceeds @ \$10,000/Lot	—	200	500	700	900	1,000	960	460	4,720
Proceeds — Costs	—	(55)	118	191	263	363	374	460	1,714
Interest @ 11%	—	6	—	—	—	—	—	—	6
Net From Development Ops.	—	(61)	118	191	263	363	374	460	1,708
Land Acquisition @ \$2,500/ac.	415	—	—	—	—	—	—	—	415
Pre-Development Costs	66	—	—	—	—	—	—	—	66
Debt from Previous Year	—	(534)	(654)	(608)	(484)	(274)	59	433	—
Interest @ 11%	53	59	72	67	53	30	—	—	334
Current Operations	(534)	(61)	118	191	263	363	374	460	—
Cumulative Cash Position	(534)	(654)	(608)	(484)	(274)	59	433	893	893

CLUSTER PLAN								
	\$/000 (Deficit)							
Development Year	1	2	3	4	5	6	7	Totals
No. Lots Developed ⁽¹⁾	—	53	80	105	130	104	—	472
Development Costs @ \$4,222/Lot	—	224	338	443	549	439	—	1,993
No. Lots Sold	—	26	67	92	118	117	52	472
Proceeds @ \$7,855/Lot ⁽²⁾	—	204	526	723	927	919	408	3,707
Proceeds — Costs	—	(20)	188	280	378	480	408	1,714
Interest @ 11%	—	2	—	—	—	—	—	2
Net From Development Ops.	—	(22)	188	280	378	480	408	1,712
Land Acquisition Cost @ \$2,500/ac.	415	—	—	—	—	—	—	415
Pre-Development Costs	66	—	—	—	—	—	—	66
Debt from Previous Year	—	(534)	(615)	(495)	(269)	—	—	—
Interest @ 11%	53	59	68	54	30	—	—	264
Current Operations	(534)	(22)	188	280	378	480	408	—
Cumulative Cash Position	(534)	(615)	(495)	(269)	79	559	967	967

(1) Represents 30% increase over sales pace of conventional model.

(2) Product of subtracting \$2,145 (difference in lot finishing costs between plans) from \$10,000 sales price per lot for conventional plan. Thus all savings in this illustration are passed onto housing.

CHAPTER 2

C-1, C-2 and C-3 - The Commercial Districts

1. Introduction

Commercial developments have consistently been the most dynamic of all development types. They have evolved over the years in response to changing conditions and have themselves changed conditions. This can be observed in urban commercial centers which suffered dramatic declines after WW II as business moved to an automobile based suburban environment. In the rapidly developing suburbs, commercial needs at first generated "strip" commercial centers with parking in the front; they were one story in height and were usually constructed in relatively small speculative units, scattered along the highways. Later, other types appeared, larger gas stations, free standing stores with their own parking, and the first "shopping centers". By the early 1960's several new types including the "fast food" restaurant and the "shopping mall" were capturing the development dollars and many smaller "strip" centers fell into decline. The first malls were themselves eclipsed by even more massive, enclosed malls on still larger sites, which offered even more powerful marketing opportunities to retailers. At the same time, "Fast food" restaurants came to dominate the roadway based food and beverage business leaving another group of older roadway restaurants behind.

Other business related trends in the retail world have been important influences on development styles. There has been rapid consolidation among major retail store operators. The new stores which these companies built have been larger and offered still more merchandise and have required even higher business volumes.

Changes in the zoning code, made in the near future, will only affect two basic categories of activity, new construction and substantial alteration of present businesses. Detailed research on development trends in the county was not performed for this study. New commercial users, those who wish to erect new buildings or facilities are most affected by changes in the zoning regulations and it is these potential uses which have priority in evaluation. However, another group, commercial uses in transition, older commercial facilities being recycled for newer uses are also potentially affected by code changes.

A. Basic Commercial Types - Service Areas

While numerous distinctions may be drawn among the great variety of commercial uses, the most useful way to categorize the uses is by the scale of the area they are meant to serve. Commercial activity requiring large service areas such as a parts depot for a large manufacturer of consumer products may service an area extending across several states. A large building supply company may service an area for some miles, perhaps up to 20 or 30 miles, in all directions. A new shopping mall may service an area of similar size. A small milk, eggs and doughnuts convenience store may only service an area within one mile or less. A categorization based on these distinctions will have gray, indefinite areas but will, we believe, remain useful. Table 1 categorizes the basic types by service area and by the

major site and development types associated with each, described in zoning terms.

Table 1

Service Area	Site Area	Building Parking	Building Size (x1000 sq.ft)	Building Height (stories)
Neighborhood	to 1 acre	2-3/1000*	10	1
Community	1 to 8 acres	3-3.5/1000*	10-30	1
Area	8 to 25 acres	4-4.5/1000*	100-300	1-2
Regional	25 to 100 acres	5-5.5/1000*	200-500	2+

*Leasable square feet.

Neighborhood: This category includes local service businesses which support nearby residential areas. While these businesses are similar in many physical respects to businesses which serve larger areas and are often not identified separately in zoning codes it is possible to do so. Attached in the appendix, #1, is the permitted use list from "C-1" in the Philadelphia Zoning Code. It features a restriction to the first floor, a maximum of 2,000 sq.ft. per use and restricted list of uses. It is a strong illustration of a neighborhood shopping district, meant to be employed in an urban context.

Community: The next gradation that can be identified is commercial uses with a community wide base. These groupings of uses serve a larger area, extending to several miles in radius. It is a level of use not easily identified in the code language because it is likely to include some "heavy" retail uses such as furniture stores, and perhaps building supplies which may also fit definitions of the larger centers. Northampton Township in Pennsylvania has a "C-2" district which demonstrates this distinction. A summary permitted use chart, shown below in Table 2, illustrates the gradations permitted. It must be kept in mind that a structure's size, parking requirements and height limitations, in addition to use limitations, are important elements in the character of a development.

Table 2

Extracts of Permitted Uses - Northampton Township, Pa.

Permitted Uses	C-1	C-2	(Planned C)
Convenience Food Stores	X		
Outlet for Baking Products	X		
Branch Bank	X		
Ice Cream Sales	X		
Pharmacy/Sundries	X	X	X
Pick-up Laundry	X	X	X
Barber Shop	X	X	X
Tailor/Shoe repair	X	X	X
Hardware stores	X	X	
Retail food/grocery		X	X
Dry goods/apparel		X	X
Plumbing/lumber/supplies		X	X
Offices		X	X
Books		X	X
Restaurant/Tavern/Club		X	
Telephone substation		X	
Department Stores			X

Area: As in the community type previously described there are important areas of overlap with the previous categories. The establishment of higher minimum lot sizes, greater parking requirements and larger bulk of structures is appropriate. The overlap with the previous category tends to be larger free standing uses such as furniture stores, or automobile dealers. These larger free standing uses often serve substantial areas, often several entire communities, but are not regional. Also, as shopping, i.e. retail is emphasized in this discussion, it should be noted that the "area" group will include non-retail commercial, such as warehousing and larger service and repair businesses. Some warehousing belongs in the following "regional" category but it first appears here.

Regional: Regional commercial, in retail uses, is represented by some very large freestanding uses but is best known in the large mall form. Large malls require a higher ratio of parking to floor area, generally 5-5.5 spaces per 1,000 square feet; have the largest bulk and are always located in good access/visibility locations. As noted earlier major warehousing, service center type uses belong in this category. Another aspect, discussed in the parking chapter, is that the amount of parking, as a ratio to floor space, increases as the store size increases. This reflects the large required sales volumes.

B. Statements of Purpose

Zoning codes traditionally have an introductory statement of purpose to the entire code. Further, individual code sections often have additional statements intended to further define the purpose of the particular section. The value of such statements is that they can provide guidance in determining the appropriateness of proposals in borderline cases or where uses not previously

considered arise. The hazard with such sections is that they may provide applicants proposing new or different uses with arguments to permit their uses. Thus the issue becomes interpretation of the "Statement of Purpose".

In New Castle County Section 23-2 "Purposes of Chapter; Interpretation of Chapter" is typical of such introductory paragraphs. It may be characterized as restating the essential goals of land planning. The slightly abridged version which follows gives the flavor of the section:

"...the provisions...shall be held to be the minimum requirements adopted for the promotion of the public health, safety, morals, convenience, order, prosperity or general welfare; ...lessening of congestion...or reducing waste of excessive amounts of roads; ...securing safety from fire... adequate light and air and preventing on the one hand excessive concentration of population and on the other hand excessive wasteful scattering of population or settlement; for promoting such distribution... and such classification of land uses and distribution... of development and utilization as will tend to facilitate and provide... public requirements, transportation, water..., sanitation, educational opportunities, recreation, ... protection of the tax base... economy in government... fostering industries... protection of both urban and non-urban development"

Except for DPUD and airports the individual districts in the N.C.C. Code do not have additional "Statements of Purpose". In other codes Statements of Purpose are found for commercial districts. The following statement taken from the Rochester, New York, Code, illustrates the possibilities:

"C-1 - Neighborhood Commercial District Purpose: The C-1 District is intended to provide a choice of business locations for small-scale commercial uses offering primarily convenience shopping for nearby residential areas. Permitted retail and service uses are intended to serve...individual consumers and households and, to a limited extent, other nearby businesses, industries and institutions. Proximity to residences requires that...operations...be conducted at a scale commensurate with the intensity of nearby residential development, with relatively low demand for public services, transportation and utilities and a minimum of characteristics and effects which might be detrimental or a nuisance to nearby residential property."

It is noteworthy that in the Rochester Code, the Philadelphia Code, the Kent County, Maryland Code and others, the "C-1" type or neighborhood type is relatively well defined both in purpose and by permitted uses and other requirements. However, in higher or more intense classifications such clarity is not present. For instance in C-1 in Philadelphia the use list is clearly constrained but in C-2 and upwards the list is sufficiently broad for important ambiguities to arise.

The use of individual "Statements of Purpose" is potentially valuable, in our judgement, when the character desired in a district can be clearly described. If this characterization becomes difficult the "Statement" is likely to be more trouble than advantage. Further, in the commercial zoning context, the neighborhood support type commercial seems to be most easily defined.

2. Comparative Evaluation

The section which follows provides an overview of the New Castle County Zoning Code's commercial districts. This overview is in the form of a review of a number of codes, selected because of the design of their commercial sections. The comparison is divided into two basic groups of regulations- use controls and bulk and area controls.

A. C-1 Use Controls

The examination of use classifications is supported by lists developed in the course of the study. Exhaustive comparative review would require a monumental bookkeeping job not likely to be useful. The approach selected was to use permitted uses from the County Code, organized by district, as a base list and to then compare practices.

TABLE 3 Permitted Uses

N.C.C. C-1	Philadelphia C-1	City of Lancaster N-C	Pittsgrove, N.J. C-1	Northampton Township C-1	Kent County, Md. B-1	NOTES
Agricultural/Commercial Greenhouse	N	X	N	N	Y	
Aviation Facility	N	N	N	N	Y	①
Church	Y	Y	Y	Y	Y	
Country Club	N	X	Y	X	Y	
Swimming Club/Pool	N	Y	N	N	Y	
Petroleum Storage	N	N	N	N	N	
Accessory						
Police/Fire Station	N	N	X	X	NA	
Community Recreation Center	N	Y	X	X	Y	
Railway/Bus Station	N	N	X	X	Y	
R.O.W. (Street/Railway)	Y	Y	X	X	Y	
Utility Distribution	N	X	X	N	Y	
Schools & Colleges	N	X	X	N	Y	
Water Tower/Storage	N	X	X	N	Y	
Sub-Station (Elec., Gas, Telephone)	N	X	X	N	Y	
Temporary Building	Y	Y	Y	Y	Y	
Social/Civic Organization	N	N	Y	N	Y	
Office/Professional or Government	N	X	Y	N	Y	
Parking, Off Street (not overnight)	Y	Y	Y	N	Y	②
Studio (Photo, Artists, Musicians)	N	N	Y	N	Y	
Bakeries, retail	Y	Y	Y	Y	Y	
Blueprints/Photostats	N	N	Y	X	N	
Buildings for Cultural Activities	N	N	Y	N	Y	
Feed, retail sales	N	X	X	X	Y	③
Fertilizer, Pack. ret. sales	N	X	X	X	N	③
Funeral Home	Y	X	X	X	Y	
Post Office	N	N	Y	Y	Y	
Printing & Photo-Process	N	N	X	N	N	④
Restaurant(not Franchised)	N	Y	Y	N	Y	⑤
Repair & Service (indoor)	N	N	Y	Y	Y	
Retail Stores	Y	Y	Y	Y	Y	⑥
Personal Services	N	Y	Y	Y	Y	
Bank/Financial Institution	N	Y	Y	Y	Y	
Lock/Gunsmith	N	Y	Y	Y	Y	
Vending Machine	N	X	X	N	X	⑦
Tower, Radio/TV Station	N	N	N	X	N	⑧
Auto Service Station (no paint or body)	N	N	N	X	Y	⑨
Self-Service Dry Cleaning	N	Y	X	N	Y	
Massage Parlor, Adult Books	N	X	N	X	X	⑩

KEY: Y = Permitted
N = Not Permitted
X = Not Permitted or Undetermined

Uses in the C-1 District in New Castle County are considerably greater in number than are found the "neighborhood" commercial districts in other codes, although practices vary over a wide range. It is our view that the C-1 District is not, as presently constituted, a "neighborhood commercial" type of classification although it is so labeled. The notes which follow are keyed to the right hand column of Table 3.

1. Aviation Facilities: These uses are regulated by various parties, particularly the FAA. They are clearly not intended to serve a small geographic area, while in some cases they may be small in scale.
2. Parking: As a freestanding use parking is not local neighborhood oriented. Parking might best be incidental to particular uses.
3. Feed, Fertilizer: These uses are agricultural, tend to be larger scale and require truck transportation. They usually serve a large geographic area.
4. Printing: This can be a small scale, localized business but may also be quite large. To be local its size must be limited and is retail nature needs to be affirmed.
5. Restaurants, not franchise: The general category of restaurants covers an enormous range of facility types. The franchise exclusion is probably not defensible, per se, because in addition to "fast food" there are many franchise restaurants of other kinds. Size limitations and "no drive-in" regulations are a superior approach.
6. Retail Stores: This is a correct designation but deserves further refinement. Department stores, furniture, paint and wallpaper, office equipment, auto and truck parts and others might be excluded (by listing them elsewhere) and serve to reinforce the character of C-1.
7. Vending Machines: Enclosed but freestanding buildings for vending machines are permitted. This is an area requiring improved regulation which will be discussed later in this chapter.
8. Towers, radio and television: This is a use with special site requirements described in (3)(n) of Section 23-24. These site requirements are well considered but the use itself is inappropriate in "neighborhood" commercial areas.
9. Auto Service Stations: These have their own special requirements which might benefit from some revisions as noted in the final - proposed text - section.
10. Massage Parlor, Adult Book Stores: This is a delicate subject as indicated by the present spacing requirements.

These notes are intended to focus on the issue of local commercial services. The utility of a local service district in planning stems from its presumed compatibility with residential. This issue is pursued further in the Area and Bulk Section.

B. C-2 Use Controls

A parallel format is employed to review the C-2 permitted uses. Essentially C-2 can be described as heavy commercial with some restraints on warehousing and trucking. The reason it can be so described stems in large part from the fact that C-1 uses are permitted in C-2 while a list of relatively specialized new uses is added. These new uses include such items as: tourist homes, venterinary hospital, car washes, bowling alley, drive-in restaurants, adult training-trade school, outdoor and indoor theaters, and drycleaning establishments. The C-2 permitted use list is less comparable among codes than the C-1 list and as a result the table 4 yields less clear comments. As with C-1 the bulk and area controls are a major factor in the character of the developments.

TABLE 4 Permitted Uses

N.C.C. C-2	Philadelphia C-2	City of Lancaster C-B	Pittsgrove, N.J. C-2	Northampton Township C-2	Kent County, Md. C-1	NOTES
All Uses in C-1	Y	Y	Y	Y	Y	
District:						
Tourist Home	N	Y	N	X	Y	①
Veterinary Hospital	Y	N	Y	X	Y	
Clinic, Medical Office	Y	Y	Y	Y	Y	
Lab. (dental/medical)	Y	Y	N	N	Y	
Outdoor Community	N	Y	N	N	Y	
Amusement						
Armories (training)	X	X	X	X	X	②
Automatic Car Wash	N	N	X	N	Y	
Self-Service Car Wash	N	N	X	N	Y	
Building for Display	X	X	X	X	X	③
Samples						
Bowling Alley, Billiard	N	Y	Y	Y	Y	④
& Pool						
Indoor Tennis, Skating	N	Y	Y	Y	Y	
Rink						
Dance Hall, Others.	N	Y	Y	Y	Y	
Engraving	X	X	X	X	Y	⑤
Exterminator	Y	X	Y	X	Y	
Fabric Samples Assembly	X	X	X	X	X	⑥
Fence/Fence Material	Y	Y	X	Y	Y	⑦
Restaurant (with drive-in)	N-(drive-in)	Y	Y	Y	Y	
Repair & Service of Articles	Y	Y	Y	Y	Y	
Riding Academy	X	X	X	X	X	
School/Adult Training	Y	Y	N	Y	Y	⑧
Trade & Professional						
Sign Painting	N	N	N	N	X	⑨
Theatre	Y	Y	Y	X	Y	
Theatre, Outdoor Type	Y	N	N	X	N	
Telephone Central Office	Y	Y	Y	Y	Y	
Public Utility Office						
Vending Machine	N	X	N	X	N	⑩
Business Places of	N	Y	Y	Y	Y	
Builder, Carpenter,						
Contractor, Painter,						
Photo, etc.						
Dry cleaning & Shirt		Y	N	N	Y	
Service						
Motel, Motor Court, Hotel	N	Y	N	N	Y	
Par-3 Golf Course	N	X	X	X	Y	
Auto Service Station	N	N	X	Y	Y	
Public Garage						
Accessory Uses						

KEY: Y = Permitted
 N = Not Permitted
 X = Not Applicable or Undetermined

C-2 Permitted Uses

The following notes are generally of a minor nature. The C-2 classification does and should accommodate a wide range of uses and, only in its juxtaposition to C-1 will recommendations be made to change it. The notes are keyed to the right hand column of Table 4 "notes".

1. Veterinary Hospital, Kennel: This use must be 150 feet from any residentially zoned lot. This is advisable as kennels are very noisy. However, it would also be advisable to add a 50 foot minimum distance from the lot line for any kennel as well as an opaque screen requirement. A kennel may not be an easy neighbor for other commercial establishments and these interests deserve consideration.
2. Armories: The establishment of an armory is a relatively rare event. There appears to be no reason to confine them to C-2 ground as R-2 or other classifications comprising undeveloped ground may be advantageous to this use. It can better be listed as a special exception in Section 23-82 and a minimum lot size, perhaps five acres or more, and good road access placed as controls for this use. Moreover, the specific uses at an armory can be discussed with the applicant agency - and its compatibility with the proposed site evaluated.
3. Building for display of sample merchandise: This is a designation which appears unnecessary. Apparently it refers to catalogue stores or trading stamp redemption stores which are very much like department stores and are adequately covered under retail uses.
4. Bowling Alley, Skating Rink, etc.: A reasonably complete "special exception" guideline is included governing these uses. A landscape plan should be submitted for approval in addition, in order to assure treatment of all portions of the site.
5. Engraving, including Textile: The use which is intended to be permitted is not clear. If engraving as is performed in connection with the printing trades is intended its size should be confined as this is a use employing acids and heat. If the scale is large it becomes an M-1 type use. A limit of 5,000 sq. ft. gross floor area might be suitable for avoiding this pitfall. Alternately, its removal altogether might be appropriate.
6. Fabric Samples Assembly: We were unable to ascertain what this use represents. It could be removed.
7. Fences, Fence Material Excluding Open Storage: This is a category of retail which apparently relates to agricultural interests and/or to building materials especially lumber. Lumber yards are not listed in the code - probably an omission - and are not clearly a permitted use until C-3 where "retail with related storage" is permitted.
8. School, Providing Adult Training: This is quite appropriate but appears inconsistent with the fact that colleges are allowed in C-1. Some trade schools operate in enclosed facilities while others require outdoor training such as schools for equipment operators. The latter might be

required to get a special exception based on an overall site plan, landscaping, storage areas etc.

9. Sign Painting, no manufacturing: The purpose of this listing is unclear. Professional sign painters are virtually always also manufacturers. Amateur or occasional sign painters will not concern themselves with zoning permits.
10. Vending Machine, out-of-doors: This use is subject to the setback requirements only. It is probably not a desirable use except as an accessory to another use and should not exist as a freestanding use.

C. C-3 Use Controls

No detailed table has been developed for comparison of C-3 with other codes. It proved infeasible due to the cumulative nature of use lists, the distinctions become difficult to identify. In addition other major departures in practice, such as employing up to ten separate commercial districts (Philadelphia), make comparisons difficult. A brief list of comments has been developed based on the C-3 use list in Table 5.

The C-3 district is the major "open" commercial district. It adds a short list of uses including auto body shops, auctions, auto-boat-bus-mobile home dealers, crating services, ice manufacture, warehousing and commercial parking lots. These uses, particularly auto body shops and the vehicle dealers must comply with special rules on lot size, spacing from adjacent uses, driveway locations, curb cuts and lighting among others. These special requirements are appropriate although the additional requirement of a landscape plan, indicating the treatment of the entire site would be valuable.

Table 5

C-3 District - Permitted Uses

	<u>Notes</u>
1. All uses in C-2 District	
2. Automotive Paint/body shop **	1
3. Auction	
4. Automobile/Boat/Bus/Truck/Mobile Unit/Camper/Motor Bike, cycle/Utility Trailer Rent & Sale **	2
5. Crating Service	3
6. Frozen Food Locker	
7. Ice Manufacturer, Storage/Sales	4
8. Parking Lot, Comm.	
9. Sign Painting and Manufacture	5
10. Warehousing	
11. Retail Sales (w.storage/warehousing)	6
12. Wholesale sales w. storage (enclosed)	
13. Accessory Uses *	

The following notes, like those in C-2 are generally minor in importance.
Notes:

1 and 2: Paint and body shops and vehicle dealers: These uses are different in scale, i.e., auto body shops can be quite diminutive, but they both require the outdoor storage of vehicles. This type of storage is intrinsically difficult because it is often long-term, may involve vehicles under repair in ugly condition, often requires security fencing, and, except for the display area of dealers, there is little need for good appearance. The present code addresses functional problems reasonably well but total site development, its organization, landscaping and circulation is also important. As noted, a landscape plan requirement would be appropriate.

3: Crating Service: It is not known whether such uses are occurring but apparently they are not in great demand as no telephone listings for them could be found. As they might be termed, "crate dealers" or crate shops, or packaging shops as well, it may be reasonable to remove this listing and let them get by as "retail" or wholesale.

4: Ice Manufacture: Because the need for ice commercially is now almost entirely met by individual ice making machines the listing is of lesser importance. Some businesses still buy ice from outside suppliers such as the fishing industry and some restaurant/bar/caterer operations. Most ice dealers today operate chains of coin operated vending machines or similar arrangements. The machines themselves are certainly commercial but the ice manufacture is virtually an industrial use.

5: Sign Painting and Manufacture: This listing is similar, but with manufacturing, to the listing in C-2. As the manufacture of signs involves glass, metal and plastic fabrication as well as use of rare earth gases it might be best to confine sign manufacturing to M-1 or to limit this use in C-3 to buildings of a maximum of 5,000 sq. ft. gross floor area.

6: Retail Sales with Storage and Warehousing: While there are obvious situations which fit this description such as furniture warehouses which are the location of some selling at certain times, it is not clear how much storage becomes "warehousing". As will be suggested in the final section of this Chapter, the "retail" uses would be more serviceable if the definitions were clarified, especially in C-1 and C-2 Districts. This would clarify these uses in C-3.

3. Bulk and Area Requirements

A. Introduction

The present bulk and area requirements in the Commercial Districts are as follows:

Minimum lot size:

Sec. 23-40. Commercial Districts

In any C-1, C-2, and C-3 district, the minimum lot area for any permitted use, together with its accessory buildings, shall be five thousand square feet; except, that in the case of a building which is part of a row of attached commercial structures on separate lots the minimum lot area shall be

three thousand square feet; provided, that parking space and loading space are provided in accordance with the requirements in article IX of this chapter.

There is no minimum lot width but there are height limitations, setback and rear yard minimums. These are listed below in Table 6.

Table 6

	C-1	C-2	C-3
Maximum Height	35' (3 sty.)	45' (3 sty.)	55' (3 sty.)
Minimum Front Setback	40'	40'	40'
Minimum Rear Yard	20'	20'	20' (or 1/2 bldg. ht.)

The side yard minimum is based on adjacent uses. The relevant section is reproduced.

Side Yard Requirements:

Sec. 23-60. Commercial and manufacturing districts.

In any commercial or manufacturing district side yards shall be provided in conformance with the following regulations:

(1) No side yard is required in a commercial or manufacturing district; except, that along a side lot line forming a boundary line between such commercial or manufacturing district and any residence or office and research office district, a side yard shall be required equal to the minimum side yard of the most restrictive abutting district; but not less than twenty feet in the case of a commercial district abutting any residence district; and, except, that the minimum side yard in the case of a bowling alley, billiard and pool parlor, skating rink, dance hall, indoor tennis court, or other similar indoor recreation use located adjacent to a lot on which a dwelling is located shall be forty feet, and in the case of any such use located adjacent to a commercial or manufacturing district, shall be ten feet.

As may be apparent from reviewing these regulations the commercial districts are relatively unfettered by bulk and area requirements. The variations in maximum height and rear yard represent only slight constraint, a policy system clearly designed to avoid hampering commercial activity in the County. An important note, however, is that certain uses such as service stations, auto body shops and others have special regulations (some already discussed) which govern their "Special exception" status. These regulations serve to differentiate bulk and area issues for these uses and, on the whole, appear to be effectively designed.

B. Comparative Review

The comparison with other codes which follows illustrates the relationship between New Castle County policy and that of others. It suffers from the same difficulty as the use tables in that the nature of a zoning classification is in part its permitted uses and, in part, the bulk and area requirements. However, notwithstanding these issues we have compared the three classifications with the

three "lowest" classifications of other codes - where three were present - and have found some instructive differences.

Table 7 Bulk and Area Controls

	NEW CASTLE		KENT COUNTY		PHILADELPHIA		PITTSBURGH N.J.		DISTRICT OF COLUMBIA		PRINCE GEORGES CO.	
MINIMUM Lot Area Sq. ft.	C-1	5,000	B-1	none	C-1	1.	C-1	2 ac.	C-1	1.	C-1	none
	C-2	5,000	C-1	none	C-2	1.	C-2	1 ac.	C-2	1.	C-2	none
	C-3	5,000			C-3	1.	C-3	25,000	C-3A	1.		
MINIMUM Lot Width	C-1	none	B-1	none	C-1	16'	C-1	200'	C-1	1.	C-1	none
	C-2	none	C-1	none	C-2	16'	C-2	150'	C-2	1.	C-2	none
	C-3	none			C-3	16'	C-3	125'	C-3A	1.		
Height Limit	C-1	35'	B-1	35'	C-1	1.	C-1	35'	C-1	40'	C-1	35'
	C-2	45'	C-1	40'	C-2	35'+	C-2	35'	C-2	60'	C-2	48'
	C-3	55'			C-3	none	C-3	35'	C-3A	60'		
Front Setback	C-1	20'	B-1	50'	C-1	1.	C-1	50'	C-1	20'	C-1	none*
	C-2	40'	C-1	50'	C-2	none*	C-2	50'	C-2	none	C-2	none*
	C-3	40'			C-3	none*	C-3	50'	C-3A	none		
					* UNLESS LEGALLY REQUIRED WINDOW						* EXCEPT ON MAJOR STREET - THEN 75' FROM CENTERLINE	
Rear Setback	C-1	20'	B-1	none*	C-1	1.	C-1	50'	C-1	20'	C-1	none*
	C-2	20'	C-1	none*	C-2	10% of	C-2	25'	C-2	4"/1'h	C-2	none*
	C-3	2-1+			C-3	none	C-3	20'	C-3A	4"/1'h		
			* EXCEPT ABUTTING RESIDENTIAL		* DEPTH OF LOT						* UNLESS ABUT. RESIDENTIAL	
Side Yard	C-1	none*	B-1	none*	C-1	1.	C-1	25'	C-1	3"/1'h	C-1	none*
	C-2	none*	C-1	none*	C-2	5'	C-2	25'	C-2	3"/1'h	C-2	none*
	C-3	none*			C-3	5'	C-3	15'	C-3A	3"/1'h		
	* EXCEPT ABUTTING R.O.D. DISTRICTS		* EXCEPT ABUTTING RESIDENTIAL								* EXCEPT ABUTTING RESIDENTIAL THEN 8'	
Maximum Percent Building Coverage	C-1	none	B-1	none	C-1	1.	C-1	15%	C-1	40%	C-1	none
	C-2	none	C-1	none	C-2	75%	C-2	15%	C-2	60%	C-2	none
	C-3	none			C-3	75%	C-3	15%	C-3A	60%		
Maximum floor Area Ratio	C-1	none	B-1	none	C-1	none	C-1	none	C-1	100%	C-1	none
	C-2	none	C-1	none	C-2	none	C-2	none	C-2	200%	C-2	none
	C-3	none			C-3	450%	C-3	none	C-3A	300%		

1. Most restrictive abutting district -- lowest lot area in Philadelphia is 1400 square feet.

Comments on Current Bulk and Area Regulations

Minimum Lot Area: All districts have a 5,000 sq.ft. minimum lot area. This size, which is quite small, reflects the strip or row commercial demand for smaller individual lots. The code permits individual lots as small as 3,000 sq.ft. in row commercial developments. The small minimum lot size permits the subdivision of commercially zoned ground into small developable units. This has the desirable effect of permitting small entrepreneurial activity but has the undesirable effect of allowing piecemeal development of commercial roadway frontage. The attendant blizzard of signage, curb cuts and small structures is likely to have a poor appearance and may cause unsafe interface with roadways.

While Kent County and Prince Georges County, in Maryland, also permit small lots and only Pittsgrove, N.J. an essentially ex-urban area, requires large lots it is our view that larger lots are desirable. It should be kept in mind that only new commercial proposals would be significantly affected by such a change. Further, the 3000 square foot minimum in row commercial could be retained, avoiding the creation of some non-conformances and permitting the sale of speculatively built stores.

Minimum Lot Width: The issue of lot width is usually resolved by developers on a pragmatic basis. It is possible to imagine lots less than 50 ft. in strip commercial developments but such a width would be rare in freestanding designs. Some minimum perhaps equal to R-1CC at 80 ft. or R-1-C at 60 ft. might be useful to eliminate extreme designs. Naturally in unified developments of several stores the individual lots of the uses could be narrower, even as little as 20 ft.

Height Limit: Experience gained while looking at actual development in the County indicates that height limits have not been a problem. That is, developments built to the allowable limits are rare. One idea which is employed in other areas is to have a height limit equal to the cornice lines found in the area nearby, usually on the same road for some distance in each direction. This is sound practice in areas which are in part residential. The zoning height limits for residential - generally 35' or 40' - are seldom the built heights except in urbanized areas.

Front Setback: The 40 ft. required setback is a typical distance in other codes. What is done with this setback is the issue. As parking is permitted in the setback area the ground may serve only as a strip of blacktop in front of a narrow concrete entrance pad. This practice is both ugly and unnecessary. Merely increasing the setback will not improve it. A required planting strip, setting the parking back from the lot line would be a more reliable method for achieving improved edge conditions along roadways. The developer would have to work out the effects in the planning of the lot. 40' is just enough to encourage the paving of the entire setback because a single strip of spaces, a cartway, and a small sidewalk will just fit. No change in minimum setback will be recommended; an increase to 50 ft. or 60 ft. will face the same problems.

Rear Setback: The present 20 ft. requirement appears to be minimal. Circulation in the rears of structures, for deliveries and for trash removal is commonly needed. This type of usage will cause problems to abutting

properties in some cases. Other codes, i.e., Kent County and Prince Georges County, tie the rear setback to the adjacent zoning classification. This practice would be an asset to New Castle County and would be similar to the side yard system already in use.

A system which has as its minimum 20 ft, or the height of the rear wall of the structure whichever is greater, and a 10 ft. landscaped buffer if adjacent to residentially zoned ground would put developers on notice that some sensitivity to all site edges is needed.

Side Yard: Section 23-60 was already reproduced. There is no side yard required unless abutting a residential or office district. The side yard requirement should be more definite in a manner parallel to the rear yard system. As 12 ft. is a basic, one-way, cartway size it might make an appropriate minimum. The rules for situations where the side yard abuts "O" or "R" districts should be retained. This will avoid creating an unnecessary non-conformance.

Maximum Percent Building Coverage: This type of control is only used in multi-family R and in O districts at present in the County. The highest listed coverage is 35% in the R-4 and R-3G districts. This maximum is generous when analyzed in concert with the parking requirements in those districts. A maximum of 25% as recommended for the O-1 district in Chapter 5 of this report, might be very suitable for commercial districts.

Maximum Floor Area Ratio: This type of control is best suited to an urban environment. It is our view that such a system would make little or no contribution in the County given the other controls on commercial development.

4. Revising the Commercial Districts

A. Introduction

New Castle County contains an enormous range of active land uses and this range is likely to continue in the future. The most active recent development has been residential and newer retail types such as shopping centers and fast food shops. Two basic directions for improving the commercial districts are suggested. The first is an updating of the language describing the present districts. It would eliminate a few uses and clarify others while modifying the bulk and area controls. The second direction is to improve the C-1 district - to fine tune it - to increase its compatibility with residential development, to make it a residential support district as discussed at the start of this chapter.

The upgrading of the C districts will serve to modernize them and to improve site plan quality while not altering their fundamental structure thus avoiding widespread remapping or the creation of extensive non-conformances. The modernization should include the removal of some uses, and the addition of some uses as well as adding some additional standards to avoid known development pitfalls. These standards generally relate to site planning issues such as relationship to road frontages and to adjacent land uses. The County has already demonstrated ability to control the major shopping center developments and some good quality work has been completed in recent years. Major developers

tend to be concerned about image, and safe access and other issues which affect development quality. As a result the discussion/negotiation process leading to permits for large projects tends to be cooperative in spirit. It is in smaller developments that the specific guidance in the code becomes critical as these developments are seldom as well thought out or carefully executed as the large ones.

The modification of the C-1 district to restrain its present "general commercial" quality is the more substantial of the proposed changes and has the most complex ramifications. What is proposed is to restrict both the number of uses and their size. The intention is to be able to use this district in close proximity to residential and institutional uses without concern that large scale uses will be placed there and with greater assurance that the developments will present an appropriate appearance for such proximity. We believe that this type of adjustment would make C-1 a more versatile district and would permit its use in more diverse locations.

Several alternative ways of approaching the problem of providing neighborhood commercial might be considered. One would be the establishment of a new district with restricted use and area regulations. This district would be "below" the present C-1 in the system. However, we have not elected this approach as it appears that three commercial districts are sufficient to serve County needs and the addition of a new district is an unnecessary complication. Therefore, we suggest modifying C-1 and to a much lesser degree C-2 to accommodate this concept.

B. Problems

The development of improved compatibility for the C-1 district may cause certain problems. The most pressing is the possible "creation" of many non-conforming uses. These uses would then be unable to expand without Board of Adjustment approval, although as discussed in Phase I, Chapter III, Non-conforming Uses and Buildings, the current rules governing expansion or continuance of non-conforming uses are sufficiently liberal to avoid severe problems. This would be changed somewhat, were the recommendations of that chapter adopted because these rules would become more strict. In order to determine the potential extent of this problem a review of the zoning maps was conducted. Two factors were observed - both strong indications that the problem would be minimal and that modification to the C-1 would be appropriate.

- o The C-2 classification is usually employed in the smaller communities.
- o C-2 and C-3 are mapped extensively along major highways, sometimes in continuous bands 300 to 600 feet deep.
- o C-1 is relatively rarely used, estimated at less than 5% of all commercially zoned acreage. The reason for this is not apparent although it may be assumed that zoning requests for commercial are usually for C-2 or C-3.

The latter point is particularly interesting in two respects. Firstly, it reflects the fact that the distinction between C-1 and C-2 is improperly drawn, ie. they are not sufficiently dissimilar to argue that one or the other is appropriate. This leads directly to the decision to employ C-2 in most cases. Secondly, there are specific uses permitted in C-2 which are often present in local commercial districts and conversely that these districts often include

businesses which are clearly C-2 types.

In an effort to discover what is leading to the C-2 choice we have inspected a number of small commercial nodes in the County. These areas, zoned C-2, were: Biddles Corner, Boydes Corner, McDonough Corner, Pine Tree Corner, Point Breeze and Port Penn. The inspection did not clearly reveal the answer to the dilemma but some possible answers were observed. Certain uses found at these locations appear to be C-2 specific, they were: Offices of contractors, plumbers, etc; drive-in restaurants; clinics/medical offices; veterinary hospitals; motels; and car washes. Another partial answer may be found in the County policy of not rezoning ground except on request - although some exceptions where the County initiated the rezoning do occur. A developer - or group of users - requesting a rezoning are apparently seldom "steered" to C-1, if C-2 is requested, C-2 is discussed and often granted. This operational habit is understandable given the fact that there is a distinct gap between C-2 and C-3 (i.e. warehousing-trucking and vehicle dealers) which is really not so clear between C-1 and C-2.

The use of C-1 deserves to be encouraged, especially if its character as "neighborhood commercial" as it is labeled on the zoning maps can be reinforced. In fact, numerous presently C-2 sites would qualify for C-1.

One issue affecting this situation is that there is no area-wide rezoning system used in the County. This is a deficiency discussed in Phase I. Many other localities have a methodical system for updating the zoning maps. They involve a review of existing conditions, a comparison with Comprehensive Plan objectives, and an ordinance development process. Such overall rezonings improve the degree to which the zoning maps reflect the Comprehensive Plan, permit integration of local community views in the overall controls and may be valuable in those cases where controversy on a particular site develops because the "spot zoning" issue can be adequately addressed. This latter issue, spot zoning, is no doubt part of the explanation for the use of C-2 in the smaller community centers. If there are a few C-2 uses it becomes difficult to zone the area C-1 and, in a sense, the C-2 uses pull the C-1 uses into their classification.

C. Specific Revisions

1. Introduction

The following section reviews each of the commercial classifications. These reviews are sufficiently detailed to allow new draft ordinances to be developed directly from the text. The revisions are in ordinance sequence and are complete, although abbreviated. Further, as County practice has called for so little use of C-1 in the past it is of some concern whether amending C-1 will be of any use. The proposed text would create a district more capatible with the residential districts and therefore should be adaptable to a wide range of locations.

2. C-1 Proposed New Code Section - Outline

The text which follows does not repeat, in full, sections which are unchanged. Their existence is noted and they are assigned a proposed new use number. This numbering sequence would change in the manner noted, while uses deleted are noted by their present number, in parenthesis.

Sec. 23-31 C-1 districts

In the C-1 districts (neighborhood shopping), no building or premises shall be used...except for one or more of the following uses:

1. Agricultural, excluding raising of mink or foxes....
(2) Airport (delete)
2. Church or other place of worship...
3. Country club, regulation golf course...
4. Swimming club...
(6) Petroleum storage, accessory... (deleted)
note: It is not necessary or desirable in C-1 to make this a use called out in the code. It would seem to permit freestanding oil storage tanks for retail oil dealers.
7. Railway or Bus passenger station.
8. Street right-of-way and railway right-of-way.
9. Utility distribution and transmission lines.
10. Public and private elementary, junior and senior high school. Public and Private College (deleted).
11. Water tower, reservoir, storage tank, pumping station and sewer. Sewage treatment plant (deleted).
12. Sub-station, electric and gas, and telephone central office, subject to special requirements ... paragraph (15) of section 23 - 23, if approved as a special exception.
13. Temporary building and temporary storage of materials in conjunction with construction to be terminated upon completion of construction but not to exceed six months except by special exception granted by the Board.
14. Social, fraternal, social service ...
15. Office, business, professional or governmental provided that such use does not exceed 5,000 square feet gross floor area.
16. Parking, off-street, not to include overnight parking of trucks which is incidental to other uses permitted in this district on the same lot.
17. Studio for artists, designers, photographers ... provided that such use does not exceed 5,000 square feet gross floor area.
18. Baker, retail... provided that such use does not exceed 5,000 square feet gross floor area.
19. Blueprinting and photostating providing that such use does not exceed 5,000 square feet gross floor area.
20. Building for instruction .. provided that such use does not exceed 5,000 square feet floor area.
(23) Feed, retail sales (deleted)
(24) Fertilizer, packaged retail sales (deleted)
21. Funeral Home, embalming.
22. Post Office.
(27) printing and photo processing (deleted)
23. Restaurant, excluding restaurant with drive-in service and provided that such use does not exceed 5,000 square feet gross floor area.
24. Repair and servicing indoors only, of any article the sale of which is permitted in this district provided that such use does not exceed 5,000 square feet in gross floor area and except as otherwise noted in this section.
25. Grocery stores providing goods for household use provided that such use does not exceed 50,000 square feet gross floor area and that the proposed plan of development has been reviewed and approved by the Department of Planning. The review of this plan shall consider the following items:

- adequacy and safety of access and circulation including deliveries and removal of waste material.
 - adequacy of landscaping and design of parking areas as required in section 23-61 and in the subdivision codes, Chapter 20 of the New Castle County Code.
26. Retail stores and shops such as drugstores, variety stores, florist shops, beverage stores, convenience markets, gift and specialty shops, hardware stores and delicatessens, provided that no single use or single combination thereof shall occupy more than 5,000 square feet gross floor area.
 27. Personal services such as shoe repair ... etc. provided that no individual use shall exceed 5,000 square feet gross floor area.
 28. Bank and other financial institution provided that such use does not exceed 5,000 square feet gross floor area.
 29. Lock and gunsmith, provided that no public firing range or public testing facility is included and that such use does not exceed 5,000 square feet gross floor area.
 30. Vending machine for cigarettes, candy, soft drinks and similar items, located within enclosed building and provided that such machines are incidental to a use permitted within this district.
 31. Amusement machines such as pinball machines and electronic games not to exceed an aggregate of five machines within a single premise and provided they are incidental to a use permitted within this district.
(35) Tower, radio television (deleted)
 32. Automobile service station and public garage, excluding paint and body shop, and excluding special purpose maintenance garages such as tire dealers, auto upholstery shops, engine rebuilders or transmission repair, if a special exception is granted by the board of adjustment as provided in section 23-85, subject to the following special requirements.
(a) minimum lot size fourteen thousand square feet
(b) maximum lot size - thirty thousand square feet
(c) = (b) etc. and one other change:
(m) or (n) the maximum number of indoor pays for automotive repair shall be five.
 33. A self service, coin operated cleaning or drycleaning establishment provided that the gross floor area shall not exceed 5,000 square feet, subject to ...
(38) Massage parlors ... adult book stores (deleted)
 34. Accessory uses...

C-1 Bulk and Area Regulations

The following changes would achieve the objectives of restraining piecemeal development; of providing an opportunity for each development to be attractively landscaped; and of creating developments which will be compatible with residential development in appearance. The following are the changes recommended, other bulk and area regulations would remain as listed.

Section 23-40

Minimum lot area: C-1: 10,000 square feet

Section 23-47

Minimum lot width: C-1: 60 feet

Section 23-50

Side Yard: C-1: 6 inches for each 1 foot of building height at sidewall, or required minimum of adjacent "R" or "O" district, whichever is greater.

Maximum Building Coverage: C-1: 25% of lot area.

3. C-2 Proposed Code Changes

The changes suggested in the C-1 district are reflected in the proposed changes to C-2. It should be repeated that C-2 is extensively mapped, both in small modes in rural areas and in enormous strips adjacent to major roadways. Its differentiation from C-3 essentially comes from three use groups: vehicle dealers; warehousing and wholesale; and retail with warehousing. The C-3 designation is used for major shopping centers -- not Planned Commercial Development as may have once been intended -- although it is not clear why C-3 is required as such uses would be allowed in C-2. Perhaps C-3's (11) "Retail sales with related storage and warehousing" is interpreted to encompass department stores. Department stores, per se, are not a listed use in the code, although such a designation is found in some other codes. Because C-2 is extensively mapped major changes are not proposed as the risk of creating new non-conformance is significant.

Section 23-32: C-2 Districts.

In C-2 districts (roadside businesses), no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used, except for one or more of the following uses:

1. any use permitted in a C-1 district, subject to all the conditions and requirements of section 23-40, relating to C-1 districts except as otherwise indicated in this section and except that gross floor area limitations listed in the C-1 district shall not apply.
 2. Motel, Motor Court, hotel and tourist home.
 3. Veterinary hospital, and kennel; provided, that buildings and runs are not within one hundred and fifty feet of any lot zoned for residential use or within fifty feet of any lot line.
 4. Clinic, medical; dentist ...
 5. Laboratory, dental ...
 6. Outdoor commercial amusement ...
 - (7) armories for meeting and training ... (deleted)
 7. Automatic car wash establishment subject to ...
 8. Self-service car wash establishment subject to ...
 - (10) Building for display of sample merchandise ... (deleted)
 9. Bowling alley, billiard and pool parlor, skating rink, amusement arcade, dance hall and other similar indoor recreation uses, if a special exception is granted...
- Note: a new definition is needed at the beginning of the code:
Amusement Arcade. Any assemblage of more than five machines such as pin-ball machines, electronic games, skee-ball machines and similar devices.
10. Engraving, including textile provided that such use does not exceed 5,000

square feet gross floor area.

11. Exterminator, provided that all toxic substances are stored in a fully enclosed secured area and that trucks containing such substances are stored during non-business hours in a parking area which is completely secured within a structure or by permanent fencing at least six feet in height.
(14) fabric samples assembly (deleted)
12. Retail sales of building materials including lumber, fencing, masonry block, concrete and similar substances in packaged form. Open storage shall be permitted in completely screened areas setback from all lot lines a distance of twenty feet and occupying not more than twenty percent of the lot area or ten thousand square feet, whichever is less. Millwork and assembly of products is not permitted.
13. Restaurant, with drive-in service or franchised sit-down service subject to the following:
14. Repair and service of any article...
15. Riding Academy provided that the location of any stable is at least one hundred (100) feet from any lot line and that all storage of feed and equipment is fully screened from any road frontage or any lot line abutting a residential or office district.
16. College or school, providing adult training in any of the humanities, arts, sciences, trades and professions provided that if such training is to occur out-of-doors and will involve any machinery.
17. Sign painting, excluding manufacture ...
18. Theater, housed within an enclosed structure.
19. Theater, outdoor type, if a special exception is granted ...
20. Telephone central office or other public utility office or operation center, including indoor storage of materials but excluding storage of natural gas, gasoline and like substances in above the ground tanks or trucks.
21. Vending machine, located out-of-doors, subject to yard and setback requirements.
22. Business places of a builder, carpenter, caterer, cleaner, contractor, decorator, electrician, furrier, mason, painter, photographer, plumber, roofer, tinsmith, upholsterer, and similar non-nuisance business, excluding open storage of motore vehicles. dyer (deleted)
23. A drycleaning and shirt service establishemnt conforming with the following ...
(27) Motel, motor, court, noted (deleted - now use #2)
24. Par 3 Golf Course, subject to the following special requirements.
a) all lighting shall be installed so as to completely avoid glare on adjacent residentially zoned ground.
25. Automobile service station, automobile self-service station, and public garage, excluding paint and body shop, subject to the following ...
26. Printing and photo processing.
27. Massage parlor ... (subject to spacing requirements now appearing in C-1)
28. Accessory uses, including sale of used merchandise.

C-2 Bulk and Area Requirements

The following proposed changes are intended to further reflect the medium-heavy commercial nature of the C-2 classification. They would have the impact in some cases of creating non-conformances but, the effect would not be onerous due to the flexibility granted such uses. The following changes are in addition to the remaining bulk and area regulations:

Section 23-40

Minimum lot area: C-2: 20,000 square feet.

Section 23-47

Minimum lot width: C-2: 100 feet

Section 23-60

Side yard: six inches for each one foot of building height at side wall, or required minimum of adjacent "R" or "O" district whichever is greater but not less than 12 feet.

C-3 Use Controls and Bulk and Area Controls

As C-3 districts are meant to accommodate the heaviest commercial uses and to provide for large scale operations little is suggested for change. However, several listings could be clarified particularly the "retail sales" paragraph. As was discussed "crating service" could be dropped. The changes below would provide for the transition to heavy retail.

(5) crating service (deleted)

(11) Retail sales, including department stores, with related

The bulk and area controls proposed for C-2 would be appropriate for C-3 as well. It might be advisable to increase the lot size still further but the risk of creating non-conformances increases. This should be reviewed by County planning staff but an increase to 40,000 square feet minimum might be in keeping with the concept.

P2:

wall of the building;

- (b) Signs may be illuminated; provided, the illumination shall be focused upon the sign itself, so as to prevent glare upon the surrounding areas, but it shall not be flashing, intermittent, or animated illumination;
- (c) Signs which revolve shall be prohibited;
- (d) Any revolving device which causes intermittent flashes of light to be projected shall be prohibited.

§14-303. "C-2" Commercial District.

(1) *Use Regulations—General.* The uses permitted in this district shall be:

- (a) In a completely enclosed building unless otherwise specified;
- (b) As respects the sale of goods or merchandise, shall be at retail;
- (c) As respects the rendering of services, shall be with the ultimate consumer.

(2) *Use Regulations—Without Certificate.* Subject to the provisions of (1) above, where applicable, the specific uses permitted in this district shall be the erection, construction, alteration or use of buildings and/or land for:

(a) The uses permitted in any Residential District, except attached buildings used solely for dwelling purposes. All use qualifications provided in Residential Districts are not required in this district.

(b) The following sales, separately or in any combination: Antiques; art goods and artists' supplies; automobiles and parts excluding installation; bakery goods; bicycles, motorcycles, boats, and farm equipment; books; photographic equipment; china, glass and metalware; confectionery goods; cosmetics; delicatessen goods; department store merchandise; draperies; drugs, dry goods; electric appliances and fixtures; floor coverings; florists' merchandise; fruits and vegetables; furniture; garden supplies; gifts; groceries; hardware; hobby and handicraft merchandise; household appliances; jewelry; luggage; meat; music materials and merchandise; musical instruments; newspapers and magazines; office equipment and supplies; optical and orthopedic goods; packaged paints; radio and television sets and parts; seafood except as provided in sub-paragraph (3) (i) below; sporting goods; stationery; variety store merchandise ("5-and-10-cent store" wallpaper; watches and clocks; wearing apparel;

(c) Barber, beauty shop, bicycle rental, costume and clothing rental hat cleaning, photographer, tailor shop, taxidermist;

(d) Blueprinting, duplicating and kindred reproduction services, not to exceed 1,500 square feet in gross floor area;

(e) Business or professional office or agency, financial institution, school, radio or television studio (for transmission towers, see 3 (l) below);

(f) Funeral parlors, including the sale of morticians' goods;

(g) Hand laundry, laundry pick-up agency and/or dry cleaning pickup agency, and each use, singly or in any combination, not to exceed 1,500 square feet in gross floor area;

(h) Instruction in music, arts, or sciences;

(i) Laboratories (analytical, chemical, and research) and assay office not to exceed 1,500 square feet in gross floor area;

(j) Personal service or treatment of patients;

(k) Post offices;

(l) Printing, publishing, and related trades and arts, not to exceed 1,500 square feet in gross floor area;

(m) Private open-air parking lot, incidental and contiguous to any use permitted in this district (subject to provisions of §14-1400);

(n) Repair of household appliances and fixtures, jewelry, musical instruments, photographic equipment, radio and television equipment, shoe dental or prosthetic laboratories, or optical lens grinding, not to exceed 1,500 square feet in gross floor area;

(o) Restaurant (see 3 (p) below), cafe, soda or ice cream fountain, catering, including outdoor dining areas;

(p) Treatment or sale of pet birds and pet animals, and animal hospitals, not to include dog kennels or public stables;

(q) Water booster or sewer booster sub-stations, telephone exchange buildings, railroad passenger stations, electric transforming or gas regulating sub-stations; provided, that any facilities used in connection with a electric transforming or gas regulating sub-station located in the open area shall:

(.1) Not be within 50 feet of any Residential District,

(.2) Have a green belt at least 4 feet high containing evergreen shrubbery and/or trees to be planted and maintained in an area at least 3 feet in depth around the entire inside perimeter of the lot, except at point of ingress or egress,

(.3) Shall not be used for the storage of equipment or vehicles; (r) An outdoor advertising or non-accessory advertising sign as permitted in Chapter 14-1604; provided:

(.1) the minimum lot frontage is 30 feet; provided, that in the case of corner lots, the shorter frontage shall not be less than 30 feet;

(.2) the minimum lot area is 2,700 square feet;

(.3) no sign face of 300 square feet or less in area shall be erected within 75 feet of any residentially-zoned property within the same block; provided that, the sign or its structure is visible from said property. No sign face more than 300 square feet in area shall be erected within 100 square feet of any residentially-zoned property; provided that, the sign or its structure is visible from said property;

(.4) Sign Area:

(a) for intermediate lots and for corner lots with less than 150 feet of combined street frontage, the maximum sign area permitted shall be 300 square feet per face, not to exceed 600 square feet per face for "back-to-back" or "V"-shaped signs;

(b) for corner lots with a minimum combined street frontage of 150 feet, the shorter of which shall not be less than 30 feet, the maximum sign area permitted shall be 700 square feet per face, not to exceed 1,400 square feet per face for "back-to-back" or "V"-shaped signs;

(c) for intermediate or corner lots which have a minimum of 100 feet of frontage in addition to the minimum required footage; an additional sign of 300 square feet per face not to exceed 600 square feet for "back-to-back" or "V"-shaped signs may be erected along each additional 100 feet of frontage; and:

(5) the maximum height for free-standing, roof, or wall signs shall be 35 feet above the average ground level at the base of the structure to the top of the sign; further provided, that an area not to exceed 20% of the length of the sign shall be permitted to extend an additional 5 feet, but in no case more than 40 feet above the average ground level at the base of the structure to the top of that portion of the sign.

(s) Accessory uses, customarily incidental to any of the above permitted uses; provided, that the accessory use does not occupy more than 25% of the gross floor area, and does not include open air storage of materials, equipment or merchandise, except as provided in sub-paragraph (m) above.

(3) *Use Regulations*—*With Certificate*. The following uses will be permitted in this district only if a Zoning Board of Adjustment certificate, as hereinafter provided, is obtained, and only in completely enclosed buildings except (d), (j), (l), (m), (o), and (w);

(a) Amusement arcades;

(b) Athletic and drill hall, dance hall, theater, motion picture theater, and other entertainment of guests and patrons as a main use;

(c) Automobile repair shop (not including body and fender work, or painting), and repair shops not listed in §14-303 (2) Use Regulations—Without Certificate;

(d) Automobile service station for the retail sale of automobile fuels, lubricants, radiator fluids and accessories, and for the performance indoors of incidental service and minor repairs to automobiles (not including body and fender work or painting, clutch, cylinder, differential or transmission repairs), incidental car washing indoors in an area not to exceed 400 square feet, and the inspection of automobiles; provided, the same is licensed by the Commonwealth of Pennsylvania;

(e) Bath house and indoor swimming pool as a main use;

(f) Billiards, pool and bowling;

(g) Bottling and/or distributing of liquids for human consumption;

(h) Central heating plant;

(i) Courtroom or courthouse building;

(j) Garages and parking as a main use:

(1) Public garage;

(2) Private garage;

(3) Public parking lot;

(4) Private parking lot, except as permitted under paragraph (m) above;

(5) Automobile sales lot;

(k) Installation of auto, boat, motorcycle, or truck parts;

(l) Open air theatre, open air motion pictures, and other open air entertainment;

(m) Outdoor amusement parks, athletic and sports fields, outdoor swimming pools, and day camps;

(n) Penal and correctional institutions;

(o) Radio or television transmission tower;

(p) Restaurant which serves patrons who remain in their automobiles;

(q) Retail dry cleaning establishment using non-flammable solvents as approved by the Department of Licenses and Inspections;

(r) Retail sale of packaged beverages as a main use;

(s) Retail sale of picture frames, candles, ceramics, leather goods, related hand-craft items with accessory making or assembling of such with hand tools only, not to exceed 1,000 square feet in gross floor area;

(t) Sales of live poultry, live fish, or live animals for human consumption;

(u) Self service laundry using residential type washing machines; provided, said use complies with the following terms and conditions: (1) Such use does not exceed 2,500 square feet in gross floor area; and (2) Such shall be permitted only from 6 A.M. to 1 A.M.; and (3) Lights located outside of the premises shall not be permitted to remain lighted after midnight.

(v) Self service dry cleaning establishment; provided:

(1) The Fire Marshall shall have certified that the premises, machines, equipment and materials are in compliance with the Fire Code set forth in Chapter 5-800.

(2) An attendant over 21 years of age and trained in the use of the equipment on the premises employed by the licensee shall be present at all times when the premises where the self service dry cleaning establishment is located is open for business.

(3) No operator of any coin operated dry cleaning equipment shall use or permit to be used any solvent other than that which has been approved, by the manufacturer of the equipment, for use therein.

(4) An interlock system shall be provided on the machine to

vent the loading door from being opened during the normal cycle. Said system may be electrical or mechanical and so connected as to remain effective in case of power failure.

(5) The licensee shall permit only the front side of the dry cleaning machines to be accessible to the customers. The working or maintenance portion of the machines shall be so constructed, located and maintained so as to be not accessible to the customer. At no time when customers are present shall the concentration of vapors, in the customer area from the dry cleaning solvent exceed one hundred parts per million.

(6) There shall be prominently posted on the premises the name, address and telephone number of the owner or operator of said business and there shall be a public telephone on the premises in a conspicuous location.

(7) Such use does not exceed 2,500 square feet in gross floor area.

(8) Such use shall be permitted only from 6 A.M. to 1 A.M.

(9) Lights located on the outside of the premises shall not be permitted to remain lighted after 12 o'clock midnight.

(w) Trolley and cab stations, bus terminals, and car and bus barns;

(x) Uses customarily accessory and incidental to the uses specified in sub-paragraphs (a) through (w) above.

(y) A use of the same general character as the uses specified in sub-paragraphs (a) through (w) above.

(4) Area Regulations.

(a) *Occupied Area.* Not more than 75% of the lot area on intermediate lots and 80% on corner lots shall be occupied by buildings.

(b) *Open area.* The open area shall be not less than 25% of the lot area on intermediate lot and 20% on corner lots and shall consist of at least the required minimum rear yard in all cases, plus such other open court and/or side yards as shall be required to equal an area not less than the total open area above required.

(c) *Building Set-back Line.* No building set-back line shall be required in this district.

(d) *Side Yards and Courts.* When side yards or courts are used, except inner courts and courts between wings of the same building, they shall have a minimum width of five feet (subject to exception, see §14-104 (12)).

(e) *Open Court Between Wings of the Same Building.* The minimum width between wings shall be 12 feet.

(f) *Inner Court.* The least dimension of an inner court shall be eight feet. Minimum area for such court shall be 100 square feet. Such courts less area than 300 square feet shall not be permitted for any building use for dwelling purposes except when used as vent shafts.

(g) *Rear Yard and Rear Yard Area.*

(.1) Buildings used for commercial purposes and/or containing le:

than three families shall have a rear yard with a minimum depth of more than 10% of the lot depth, but in no case less than eight feet.

(2) Buildings containing three or more families shall have a rear yard with a minimum depth of nine feet, and a minimum Rear Yard Area of 344 square feet, plus an additional 100 square feet of Rear Yard Area for each additional family more than three families.

(5) Height Regulations.

(a) The maximum height of a dwelling shall be 35 feet above average ground level at the base of the structure, but in no case over four stories.

(b) The permitted height of non-residential buildings shall be 40 feet except that one foot of additional height may be added for additional foot the building sets back from all lot lines; provided, however, that the maximum height of such buildings shall be 60 feet (subject to provisions of §14-231 (2)).

(6) *Off-street Loading.* Off-street loading spaces shall be provided in accordance with Section 14-1405 of this Title.

(7) *Off-street Parking.* See §14-1400 of this Title.

(8) *Signs.* Signs accessory to uses on the premises shall be permitted in this district only under the following conditions:

(a) Lots facing one street line shall be permitted a total sign area of six square feet for each lineal foot of street line;

(b) Lots facing more than one street line shall be permitted a total sign area as follows:

(.1) For the shorter street line frontage there shall be permitted a sign area of 6 square feet for each lineal foot of street line;

(.2) For the longer street line frontage there shall be permitted a sign area of 12 square feet for each lineal foot of street line.

Chapter 3

INDUSTRIAL LAND USE CLASSIFICATIONS

1. Introduction

The New Castle County Zoning Code divides industrial uses into three general categories, M-1, M-2, M-3, roughly corresponding to a "light", "medium" and "heavy" separation of industry types. This organization is consistent with the overall Code structure, which is a descending system, permitting more noxious uses in each category. The three industrial categories, located last in the Code sequence, permit the most noxious uses in the Code but they exclude many less noxious uses, such as residential, thus serving the important function of reserving land for manufacturing and other industrial activity.

The industrial sections of the Code are traditional in their organization and have remained basically unchanged since the Code was enacted. Over this nearly 30 year period of time, many changes have occurred in industrial activity. The number of industrial types has increased and the processes used in traditional types have changed, often affecting the scale, appearance and environmental effects from those originally envisioned when the Code was drafted.

2. A New Approach

The regulation of industrial activity, as a land use, has been addressed by many governing bodies in a completely new manner in recent years. The essential aspect of this new manner is that it separates industrial activities according to their actual environmental effects. Worse effects are permitted progressively until an ultimate category is reached, i.e. the "worst". These systems are known as "performance zoning". In 1970, according to the American Society of Planning Officials survey, about 31% of 270 municipalities surveyed used some form of performance zoning in their industrial regulations. Today the figure is likely to be significantly greater.

In order to appreciate the nature of such controls a brief hypothetical discussion of industrial activity may be helpful. Industry is described and understood as "making things" i.e. it is the site at which a product - a tangible product - is created. The number of products produced is, of course, enormous and they are ever changing and increasing in numbers. In the process of making a particular thing, say "widgets", various techniques may be employed. Widget "plant A" may make theirs in an open shed using a machine driven by a powerful diesel motor while "plant B" may employ a fully enclosed building and machinery driven by numerous small electric motors. If land uses are regulated according to products widgets may be in the most noxious category because of long term and bad experiences with the process used by "plant A". This may be a very unfair burden on "plant B" type operations.

Other types of manufacturing may not be penalized but may actually take advantage of a system which is based on the product. Some manufacturers may make a "light" product but conduct their operations in a ghastly manner, with scrap heaped about, poor control over fumes and over noise, etc., despite the fact that their use is termed "light industry".

As a result of these inequities systems have been developed which categorize uses by the actual impact of the use in terms of glare, noise, smoke, fire hazard, risk of explosion, dust and fumes among others. The manner in which this works requires the monitoring, at least on an occasional and, best, a regular basis, of the actual conditions found in the industrial uses. If a use slides out of compliance with the environmental impact limits for its district it may then be cited and in extreme cases made to desist. This approach is quite fair in that it rewards good industrial plant management and penalizes bad management.

In the preparation of the Phase I of this zoning code update a brief review of the potential for performance zoning for industrial was addressed. At that time New Castle County staff working on this project indicated both their interest and serious concerns about this approach. Their interest, while quite keen, was tempered by a concern that the County simply could not make the transition to performance standards at this time. Their reasons were powerful and legitimate. They were based on the fact that specially trained staff, using sophisticated and relatively expensive equipment, would be needed to monitor compliance. This change in the requirements and its related budgetary and administrative problems were not within reach in the near term. As a result the staff believed that while this type of system should be considered it would be best to concentrate, during this code update phase, on ideas which would strengthen and improve the present code, without changing its basic product related structure.

The consultant team has not generated a system of performance zoning for New Castle County. Such a system was both beyond the potential of the current study and needing of input from the potentially affected industrial users themselves. There exists a substantial body of excellent literature on the structure, methodology, and impacts of such systems. This literature would permit the County to organize a system suitable to its needs with only a moderate amount of additional research and testing. In particular, a text by Marvin A. Salzenstein prepared for the American Society of Planning Officials (ASPO) entitled Industrial Performance Standards provides an excellent overview of this subject. It covers such issues as design standards, writing the ordinance, and contains specific approaches to standards for air pollution, toxic matter, noise, vibration, fire explosive hazards, glare and others. Further, it includes a glossary of terminology and sample ordinances.

In conclusion, it is a strong recommendation of the study team, that New Castle County develop a performance system of zoning for its industrial activity. This recommendation is based on actual County need. The need is to regulate, with consistency, a complete and full spectrum of industrial activity. New Castle County faces unusual challenges. It is a large area, including the "heart" of Delaware's industrial base, and encompasses virtually every type of industrial use. As a result, ordinary use lists will always be inadequate.

3. Current County Practice

There are two principal problems facing New Castle County's industrial land use regulation efforts. Firstly, as noted, the full spectrum of industrial use found in the United States is found in the County. Secondly, a key purpose of adequate zoning regulations is to allow the County to reserve ground for these activities, yet because their regulation is difficult these uses are seldom

welcomed. The question facing this zoning code update effort is: can the County improve its industrial zoning system so that additional ground can easily be made available while protecting the interests of the other users in the County? The discussion of the current code and proposed changes in the following sections is an attempt to refine and improve the present system so that the granting of industrial zoning to new sites can be accomplished with more assurance that the resulting use will be both an asset to the County and a good neighbor to adjacent uses.

Over the period, now about 50 years, that zoning has been in use in the United States, there have been numerous complaints, law suits and heated arguments over whether or not zoning controls are reasonable. Users denied permits are, in their view, injured persons, while neighbors to uses permitted, but objected to, also see themselves as injured persons. The real value of zoning controls is their ability to provide a degree of assurance that uses will not be injurious to each other. Controls which seem strict are, in many cases, the correct approach to creating a compatible system. It may be better to have a system which puts some burden on manufacturing uses, but permits them, than to have a highly exclusionary system, such as often sought by potentially affected parties.

4. The Industrial Districts

A. Introduction

The current New Castle County Zoning Code system for industrial or manufacturing uses is in a format identical to the rest of the code ie. it is set up around a permitted use list and area and bulk regulations. Modifications to this system must be structured in a parallel manner as they evolve and it is this type of modification which will be explored. It should be restated that this type of structure is particularly well suited for industrial zoning due to the enormous operational variety which may exist within the same "use". Despite this pervasive difficulty it is possible to improve the utility of the industrial zones, to make them more readily "mappable". The approach to improving the usefulness of the industrial sections should be one which demands improved site design and more careful attention to site edges, and to the physical configuration of the developments. These are traditional zoning concerns and can be regulated without administrative or staffing impacts of a significant nature.

B. Basic Structure of the Use Controls

The basic structure of the present code calls for progressively more "noxious" uses to be permitted in each of the three industrial districts. At present, this structure is reflected entirely in the permitted use lists as there are no major distinctions among the industrial classifications in bulk and area controls. Therefore, these use lists must be the first order of concern. Table 1 which follows is an abbreviated summary of the uses permitted in each of the manufacturing districts. This summary illustrates the degree of order in the overall structure and provides some insight into the intended activities in each district.

The structure of this system can be understood by tracking certain types of uses through the code. Manufacturing in M-1 is confined to "final products" and

TABLE 1

Uses Permitted in M Districts

M-1	M-2 all uses in M-1 and:	M-3 all uses in M-2 and:
offices (not professional)	junk yard	slaughter house
cooking - baking	natural gas storage	bleach and chlorine
laboratories	oil storage	manufacture
manufacturing (no basic materials)	(refinery related)	corrosive acid
light manufacturing	auto assembly	manufacture
(electric power)	chemical manufacture ²	fertilizer
utility substation	concrete mixing	manufacture
bottling works	machinery manufacture	hide curing & tanning
building supplies	(power forges)	public incinerators
fuel storage (retail)	metal products	linoleum manufacture
freight terminal	(no basic products)	oil refinery
warehousing/wholesale	rubber products	ore smelting,
petroleum storage	(tires)	blast furnace
(underwriters approval)	all other industrial	WITH ZONING BOARD
accessory commercial	(except those in M-3) ³	APPROVAL:
(10% limit)		highly flammable
		cellulose
		explosives-fireworks
		animal glue/gelatin
		paint varnish lacquer
		reduction of garbage
		or dead animals
		other industrial
		uses ⁴

1. "...free from disturbing odors and other factors". 23-34 (5)
2. "...not involving noxious odors or danger from fire and explosives..." 23-35 (6)(b)
3. "...provided, that it is no more objectionable from the point of view of smoke, fumes, noise..." 23-35 (6)(k)
4. "Any ... use ... which would not, through the emission of excessive smoke, fumes noise,... prove injurious to the safety and welfare of the neighborhood..." 23-36 (3)(f)

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restricted in terms of machinery types. In M-2, machinery manufacture is permitted including power forges and so forth. In M-3 "other industrial uses" in addition to the list provided are permitted. A progression in their intensity is intended and is present. Fuel and petroleum products may be "stored" in M-1, oil storage-refinery related and chemical manufacture are permitted in M-2, and oil refineries are permitted in M-3. Again a progression exists. The comments which follow on each district examine, in more detail the permitted uses and suggest some of the problems which may occur. Further, as is mentioned repeatedly in this Phase II study the impact on the landscape of a development is determined by both its permitted uses and its bulk and area controls - which are reviewed in the next section.

C. Comments on the M-1 District

The M-1 district has a very broadly defined list of permitted uses but some constraints are placed on the potentially difficult uses. The notes which follow are intended to highlight the manufacturing aspects of the M-1 district. The following excerpts from the code describe the manufacturing uses.

(4) Manufacture of the following: Clothing; electrical appliances; food products preparation; leather goods; machinery parts and accessories, such as bolts, nuts, screws, washers, gears, etc., provided power forges are not employed on the premises; small tools, provided power forges are not employed on the premises. In no case, however, shall basic materials be processed on the premises.

(5) Such other types of light manufacturing as are similar in character to those enumerated in the preceding paragraph, employing electricity or other non-objectionable machinery and processes, and free from disturbing odors and other factors.

Among the uses described in these paragraphs are a number of uses known to be "difficult neighbors" if they are not conducted with considerable care. These include "food products preparation" and "leather goods", but moreover the catch-all nature of this description is particularly worrisome. Further, use number "(2) laboratories: research, experimental or testing" is also fairly loose. A laboratory which works with animals may be built, as can one which tests potentially dangerous substances. This may be a cause for concern in the "lowest" industrial category. Further, an inconsistency exists in that there is no listing in M-1 which states that uses specifically permitted in M-2 or M-3 are prohibited. Such a listing exists in M-2.

D. Comments on the M-2 District

The M-2 district has all the uses permitted in M-1, plus a variety of others, each having its own potential, if badly managed, to become a serious nuisance. Several full use listings are included to illustrate this potential.

(2) A junk yard, including the open storage of metal or other scrap materials, or of automobiles or other vehicles or machinery intended for dismantling or demolition, in each case provided it is within an area fully enclosed by a solid fence or wall of sufficient height to screen adequately the operation from public view.

(3) Storage of illuminating or natural gas; provided, that no tank with a capacity in excess of five hundred thousand cubic feet shall be within less than one hundred feet of any lot line; and provided, that, if the pressure is greater than one hundred pounds per square inch, no tank with a capacity in excess of two hundred cubic feet shall be within less than one hundred feet of any lot line.

(6) The following manufacturing and industrial uses, subject to the requirements for parking space and loading space in article IX of this chapter:

- (a) A plant for the assembly of automobiles or farm equipment.
- (b) Chemical manufacture not involving noxious odors or danger from fire or explosives, such as adhesives, calcimine, salt processing and vegetable gelatin, glue and size.
- (c) Concrete central mixing and proportioning plants.
- (d) Electricity or illuminating gas production plants.
- (e) Food products, manufacture of.
- (f) Machinery, light and heavy, manufacture and repair, including power forges.
- (g) Metal and metal products manufacturing, processing, fabrication and assembly, but excepting the processing of basic products of such metals from raw materials including open hearth furnaces and Bessemer converters.
- (h) Rubber products, including tires and tubes and tire recapping.
- (i) Shipbuilding and ship repair yards.
- (j) Wood and lumber, bulk processing including saw mills, planing mills and wood-preserving treatment.
- (k) Any other manufacturing or industrial use not listed in section 23-36 as an additional use permitted in M-3 districts; provided, that it is no more objectionable from the point of smoke, fumes, noise, odors or dust than the permitted uses listed above.

Clearly, the M-2 district is intended to accommodate relatively heavy industry. Some of the listings reproduced here are well known troublesome uses, but they are uses which must be accommodated in a full spectrum code. In brief, junkyards - but they must be screened from public view (is their appearance the only negative effect?); storage of huge amounts of natural gas - 100 feet from the lot line (would 100 feet make any difference in the event of a serious mishap?); chemical manufacture "not involving noxious odors" etc. (who is to test/judge whether compliance is achieved and what odor is noxious?); "concrete central mixing and proportioning..." This use is definitely very noisy and dusty and requires heavy truck traffic; and "metal and metal products manufacturing...", there is no prohibition on heavy forges nor is there any statement concerning their output of noise or vibration, although basic furnaces, ie. steel mills are excluded.

E. Comments on the M-3 District

The M-3 district is the "heaviest" district and must accommodate basic, large scale uses. Although a specific use list is provided, the clause (3) (f) reads:

- (f) Any other manufacturing use not expressly prohibited by law

which would not, through the emission of excessive smoke, fumes, noise, odors or dust, prove injurious to the safety or the welfare of the neighborhood into which it proposes to go or destructive of property values.

It could accurately be stated that this is the catch-all of industrial districts. A short selection of the permitted uses is included below, prefaced by the lead paragraph which places certain "ultimate" limitations on industry in New Castle County.

(2) The additional manufacturing and industrial uses listed below, subject to the following provisions: Requirements for parking space and loading space in article IX of this chapter; the employment of practicable protective methods available to each particular industry for reducing the hazard from fire or explosion and preventing the impairment of the value of nearby residential or commercial property through excessive noise or the emission of excessive smoke, fumes or odor.

- (a) Abattoir or slaughter house, subject to conformance with regulations of the state board of health.
- (b) Bleaching powder, ammonia or chlorine manufacture.
- (c) Corrosive acid manufacture, such as sulphuric, nitric, picric or hydrochloric acid.
- (d) Fertilizer manufacture from organic material, or the compounding of such fertilizers on a commercial scale.
- (e) Hide curing and tanning.
- (f) Incineration of refuse or garbage when controlled by the county or a municipality thereof.
- (g) Linoleum manufacture.
- (h) Oil refinery, including the processing of natural crude petroleum projects and processes related and accessory thereto.
- (i) Ore smelting, blast furnace, coke oven, open hearth furnace or Bessemer converter.

With the concurrence of the Board of Adjustment the following uses are permitted:

- (a) Proxylin manufacture or processing; the manufacturing of explosive or highly flammable cellulose products.
- (b) Fireworks or explosives manufacture.
- (c) Animal glue, gelatin or size manufacture.
- (d) Paint, varnish or lacquer manufacture.
- (e) Reduction of garbage, offal or dead animals on a commercial basis.

In addition to the use lists there is a provision Section 23-37 which applies only to very large businesses employing "more than seven thousand employees in all shifts" and requires that the Department of Planning determine that the proposed use or enlargement will not "overtax" the street system, "seriously impair" the adjoining residential neighborhoods or "prevent an economic use of the lands in the vicinity".

Another footnote to the M districts is Section 23-38:

Section 23-38. Residential uses prohibited.

In an M-1, M-2 or M-3 district no building shall be used, erected or altered for residential purposes other than a dwelling for a caretaker, watchman or janitor employed on the premises.

This serves the very important purpose of protecting manufacturing zoned ground from exploitive development.

F. Bulk and Area Controls

The present bulk and area controls for M districts are very straightforward. They are virtually identical for all districts. The features of these controls are summarized on Table 2.

Table 2
Bulk and Area Controls

	M-1	M-2	M-3
minimum lot size	5,000 SF	5,000 SF	5,000 SF
height limit	55'	90' ¹	90' ¹
setback	40'	40'	40'
rear yard	20' ²	20' ²	20' ²
side yard	none ³	none ³	none ³

1. Or if setback of building is over 2 x height, height may be greater.

2. Or one half of height of adjoining building whichever is greater.

3. Or amount required in the abutting district.

One other important control on screening is incorporated in the text:

A solid fence or wall a minimum of five feet in height, or a landscape screen, shall be erected along all property lines separating permitted uses in M-3 districts from any lot zoned for residential use. Such solid fence or wall or landscape screen shall not extend forward of the building setback line.

Minimum lot size: All districts call for 5,000 square feet which is a very small lot. This figure appears particularly small in light of the use lists reviewed previously. It is difficult to imagine but an abbatoir (slaughterhouse) would be permitted on a lot 50 feet x 100 feet. While this is an extreme example this lot size minimum appears to be too low.

Height limit: Height limits become issues in relation to the size of the lot, adjacent properties and appearance. The 90 foot limit with a 40 foot setback again appears to be very generous. A 90 foot building is equal to about ten stories in residential development. It is true that some facilities, such as grain elevators, petroleum cracking towers, and others are tall and allowance must be made for them.

Setback: The minimum 40 foot setback is reasonable in that it allows for some

buffer to be developed. However, the balance with the building height limit may be termed very liberal.

Rear Yard: The rear yard requirement of 20 feet is very low, even when qualified by "or one half the height of the adjoining building". A 100 foot building would have to be 200 feet from the front lot line but only 50 feet from the rear line.

Side Yard: None is required unless the property abutts C, R or O district in which case the side yard requirement of the abutting district applies.

The bulk and area controls are clearly designed to permit full use of industrially zoned sites. They were first generated in 1954, prior to popular concern for the environment, in a strong expansionist period in the economy of the country.

5. Possible Code Improvements

A. Introduction

Two general groups of changes appear likely to be of assistance in the County's use of the manufacturing districts. Firstly, the bulk and area controls could be tightened to improve the compatibility of all M districts with other districts, thus making it easier to map these essential districts. Secondly, the lowest classification M-1 could have tightened use controls so that its utility as a truly "light" industrial district could be improved.

Effecting detailed changes in the use lists for all districts is very difficult. In the development of this Phase II study it was found that no consistent references exist to guide the development of a three tier use code system which covers the very broad spectrum of uses found in the County. This discovery was somewhat surprising as it had been hoped, by both the team and Department of Planning staff, that entirely new use lists, modern and comprehensive, could be generated. What is suggested instead is an improvement in the controls of a more limited nature.

B. New Bulk and Area Controls

The industrial districts have slightly different features and require different controls. The bulk and area controls generate the basic design characteristics of these developments and are therefore a major influence on their appearance and impact.

1. The M-1 District

M-1 Bulk and Area Controls

Minimum lot size: 20,000 sq. ft. (from 5,000 sq. ft.)

Note: This lot size permits appropriate setbacks and access design for small industrial users. While some older uses would become non-conforming their pre-existing status would provide adequate protection for their interests. This lot size is equivalent to an R-2 single family lot, and is sufficiently small to permit normal entrepreneurial activity.

Height Limit: 55 ft. (same as at present) but building height shall not exceed the setback from the adjacent lot line.

Note: This type of limit will improve the compatibility with adjacent development.

Setback: 40 ft. (same as at present) but the minimum setback may not include any required parking and shall be landscaped according to a plan submitted and approved as under the subdivision process.

Rear Yard: 20 ft. minimum (as at present) but ten feet must be provided as a landscaped buffer along rear lot lines and this buffer may not be used for required driveways, parking or fire access areas or the setback required in the abutting district whichever is greater.

Side Yard: 20 ft. minimum (present none) but eight feet must be provided as a landscaped buffer along side lot lines or the setback required in the abutting district, whichever is greater.

Note: The regulation of rear and side yards in this manner would greatly increase the potential to create M-1 districts in areas which were residential or commercial.

M-1 Use Controls

The preface to the use controls should contain the following statement:

Use Regulations. The specific uses permitted in this district shall be the erection, construction, alteration or use of buildings and/or land for the following uses, to be conducted wholly within a completely enclosed building or in an inner court, except as otherwise specified herein.

The use list, which until performance controls can be instituted remains the same, should be concluded with the following conditions, designed to clearly limit the scale of the operations permitted:

Use Conditions. The above uses are permitted only when the following conditions are met:

- (a) All uses in this district shall be carried on exclusively with off-site prepared ingredients and/or materials;
- (b) No use or process shall be carried on in this district which is specifically listed in any M-2 or M-3 district;
- (c) No kiln shall be fired except by oil, gas, or electricity, and no individual kiln capacity shall exceed 200 cubic feet;
- (d) No blast or reverberatory furnaces, or foundries shall be used;
- (e) No punch or stamping presses over 20 tons rated capacity shall be used;
- (f) No drop hammers shall be used;
- (g) Any floodlights shall be focused onto the property, and no combustion or welding shall be visible beyond lot lines;
- (h) Where any fully assembled product regularly produced by any use under Section (1) above exceeds 2,000 pounds in weight, such use shall require a Zoning Board of Adjustment Certificate.

The two changes above, borrowed and modified from the Philadelphia Zoning Code, provided as an appendix in Phase I, are well suited to assure a reasonable

compatibility, regardless of the product being manufactured. The present use list can be retained until a performance based system is adopted.

2. The M-2 District

M-2 Bulk and Area Controls

Minimum lot size: 40,000 sq. ft. (presently 5,000)

Note: The M-2 uses are genuinely "heavy" industrial. In order for any site buffering opportunities to exist the lot size should reflect the "heavy" nature of the use.

Height limit: 90 ft. + (same as at present) but building height must not exceed the setback from any lot line.

Setback: 40 ft. (same as at present) but the minimum setback may not include any required parking and shall be landscaped according to a plan submitted and approved as under the subdivision process.

Rear yard: 40 ft. minimum (20 ft. at present) but ten feet must be provided as a landscaped buffer along rear lot lines and this buffer may not be used for required driveways or fire access areas.

Side yard: 20 ft. minimum (present none) or the amount required in the abutting district whichever is greater. A minimum of eight feet must be preserved as a landscaped buffer which does not include required driveways, parking or fire access lanes.

Note: These regulations for rear and side yards are not onerous and will leave considerable flexibility in the development of adjacent sites. Buffer strips, also called for in M-1 are potentially very valuable. They would permit the later development of screening if needed and serve, when combined with the setback/rear yard requirements in adjacent districts, to provide an important strip of open space between uses.

M-2 Controls

While strengthened bulk and area controls are helpful there are a few instances where the use controls in M-2 should be strengthened:

- o junkyard: The requirement to screen from public view is good but a further requirement beyond "fully enclosed" such requiring a landscape screen of 25 ft. from all street frontages might make it possible to permit, with less public outcry, new junkyards if they are needed.
- o gas storage: The setback requirement appears minimal at 100 ft. A much larger distance, perhaps 200 ft. or more might prove both safer and more compatible with other uses. On those rare, occasions when major problems have occurred with flammable gas storage - always under pressure - the resulting conflagration has been of monumental scale.
- o Concrete mixing: This use is very dusty and should be set back from any roadway at least 200 feet. Even this large distance will not keep the dust from being an issue in areas nearby, but it would help. This idea has become more important because temporary portable mixing facilities are now in use. They can be set up on virtually any site near the user of the concrete.

3. The M-3 District

M-3 Bulk and Area Controls

While some important differences in uses do exist it is unrealistic to attempt to treat M-3 differently from M-2 in terms of bulk and area controls and we would recommend the same system as M-2.

M-3 Use Controls

M-3 encompasses the very most intense industrial uses and therefore has a very intense use list (refer to Table 1). Many of these uses have the potential to be very destructive to adjacent properties should they be managed incorrectly.

We would not recommend changes to the use lists at this time but rather would suggest a change in County Use Management activity. Safety cannot be assured by setbacks, unless they are extremely large, and other means must be found to achieve it. The various references in the code, albeit not quantified, to performance standards must be taken seriously and become active parts of County policy. Paragraph (2) in M-3 reads in part, "additional manufacturing ... The employment of practicable protective methods available to each particular industry for reducing the hazard from fire or explosion and preventing the impairment of the value of nearby property through excessive noise ... smoke, fumes, or odor." This paragraph, while subject to interpretation, actually would allow County staff to establish a minimal system of performance controls. When a plant smells excessively, for long periods, it becomes a non-conforming use which may be cited and, failing to comply, actually prosecuted. Further, the County has the right, under the code, to ask what safety measures are being taken and to investigate what the standards of that industry are. Failure to comply with that "standard practice" would, technically, make many uses non-conforming. While these approaches to problem uses might, at this time, be employed only rarely, an important precedent would be set. New Castle County government has the responsibility to manage these land use conflicts and should, in important cases, do so vigorously.

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CHAPTER 4

Board of Adjustment

1. Introduction

As zoning ordinances have been adopted and administered throughout the country, recognition of the need to allow for adjustments to the regulations for unique circumstances has led to the formation of citizen boards to hear and adjudicate cases where adjustments are desired. In New Castle County, this power has been given to the Board of Adjustment, appointed by the County Executive for terms of four years; the Board's powers and duties are described in sections 23-82 through 23-85 of the zoning code. The Board hears applications for variances, both to use restrictions and to height, bulk, and setback regulations, for "special exceptions" for temporary and permanent uses, and for appeals of decisions of county administrative staff.

This study includes a review of the process and results of the Board of Adjustment's procedures, a comparative look at other municipalities' procedures, and recent zoning techniques applied elsewhere in the country. In so doing, effort has been made to identify places where streamlining can occur. A closer look was taken at the special exception uses, standards applicable to these uses, fees charged, and other areas of particular concern identified while the study was in process by the consultants and the staff of the Department of Planning.

2. Activity of the Board of Adjustment

In order to grasp the issues addressed by the Board of Adjustment, all cases heard by the Board in calendar year 1981 were categorized by zoning district and type of relief sought; this data is summarized on the chart which follows. The Board heard a total of 307 cases, of which only 24 were denied. Such a small denial rate implies that a considerable number of issues before the Board are non-controversial in nature. Looking at the largest categories of caseload by type, we find 78 of the 307 cases (25%) were for temporary trailers, 49 cases (16%) were for variance of front yard setback requirements, 39 cases (13%) for side yards, 28 cases (9%) for rear yards, 33 cases (11%) for temporary use variances, and 23 cases (7%) for permanent use variances. Aside from 6 day care applications (2%), only 17 special exception uses (6%) were heard during 1981.

Combining front, side, and rear yard setback variance cases, 117 cases (38%) were heard in 1981, and all were granted. Looking at the distribution of the yard variances, there is a concentration in the R-1-C district; 23 cases were for front yard setback relief and 23 for side yard setback relief in this district. While the side yard requirements for this district are proportionate to the reduced lot size in relation to other single-family districts, the required front setback is 25 feet the same as R-1-CC.

Recommendations:

- 1) Section 23-14 of the zoning code empowers the Director of Planning to grant some minor variations of area, width, setback, and yard requirements for single-family homes in R-1 and R-2 districts. Expansion of the

discretionary powers of the Director would eliminate a large number of variance hearings relating to setback requirements.

It is recommended that, at a minimum, the planning director be given discretion to approve setbacks and yard dimensions for one-family residences in R-1 and R-2 districts deficient ten percent or less of the requirement; this would parallel the 10 percent lot area discretion already in the code.

- 2) A 20 foot front yard depth should be considered for the R-1-C district, as this district permits development on smaller lots and no proportionally smaller front yard requirement is now allowed.

CHART 1. CASES HEARD IN 1981 BY BOARD OF ADJUSTMENT

SUMMARY DESCRIPTION		VARIANCES REQUESTED																	TOTAL VARIANCES BY TYPE	
AREA	WIDTH	DEPTH	SETPACE	REAR	FRONT	REAR	YARD	SIDE	TEMP	SPEC	USE	USE	USE	LOT	HOUSE	CONV	DAY	SIGN	PARKING	
1	R-1-A	87120	200	50	40	40	2	2	1	1	1	1	1	1	1	1	1	1	1	1
2	R-1-BB	40000	100	40	40	15/25	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	R-1-B	15000	100	40	40	12/15	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	R-1-CC	10000	80	25	30	8/20	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	R-1-C	6000	60	25	25	5/14	23	23	11/2	2	1	1	1	1	1	1	1	1	1	1
6	R-2	21780	75	40	40	15/5	4	6	54	10	11	8	1	1	1	1	1	1	1	1
7	R-3-ED	4000	40	25	25	5/14	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	R-3	3500	60	25	30	10/25	1	4	4	1	2	1	1	1	1	1	1	1	1	1
9	R-4	4000	40	40	10/15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	R-3G	6000	25	40	40	5/14	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	O-1	20000	75	40	35	8/35	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	O-2	6000	75	40	40	15/35	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	C-1	5000	40	40	20	20	2	2	1	1	4	1	1	1	1	1	1	1	1	1
14	C-2	5000	40	40	20	20	2	2	2	1	1	1	1	1	1	1	1	1	1	1
15	C-3	5000	40	40	20	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	M-1	5000	40	40	20	20	4	1	1	1	1	1	1	1	1	1	1	1	1	1
17	M-2	5000	40	40	20	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	M-3	5000	40	40	20	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	DPLD						1	2	78	17	23	33	6	5	5	6	1	4	4	4
20	TOTAL						49	28	39	78	17	23	33	6	5	5	6	1	4	307
21																				
22																				
23																				
24																				
25																				

3. Temporary Uses

A large proportion of the cases coming before the Board of Adjustment were for temporary trailers (78 cases, or 25%), and other temporary use variances (33 cases, or 11%). A review of other codes yielded three with sections on temporary uses or structures or temporary trailers.

A. Construction-Related Temporary Uses

Some municipalities allow construction trailers, either as offices or as other equipment sheds, or both, but these are more frequently covered in the building codes than the zoning codes. Such temporary structures are thought of as a matter of right, and are allowed in conjunction with a permit for new construction or major rehabilitation and may have some limited controls such as setbacks from site perimeters.

B. Residential and Other Temporary Uses

Temporary trailers are requested for a variety of reasons. Relatives of the owners of single-family houses, frequently a son or daughter and spouse, may need inexpensive housing to get started with a new household prior to investing in their own permanent residence. Older relatives in poor health or beyond the normal working years may wish to reside adjacent to, but not with, their younger relatives. A mobile home unit may be needed for shelter when a house has been accidentally destroyed. Institutions experiencing temporary swells in enrollment may need temporary trailers to continue their full services to the enlarged client population. Of the applications presented to the Board of Appeals in 1981 for temporary trailers, only 9 percent were denied. Staff indicates that the major concerns in allowing temporary residential trailers are that they remain mainly in the R-2 district, that they be authorized for family members only, and that they be truly expected to be temporary in nature. These and other criteria could be written into a code revision allowing such temporary trailers as of right, with some limited regulations or permitting the Director of Planning or his designee to approve temporary trailers after proof of compliance with conditions.

C. Other Communities' Codes

A review of the three ordinances which deal with temporary uses may be helpful. The code provisions for temporary structures in Prince George's County, Maryland allow for special exceptions for temporary structures, including produce stands, tool sheds, contractor storage buildings, and real estate signs. The Town of Hempstead, New York permits temporary trailers for residents of a single-family residence which has been damaged by fire or act of God, for a period of six months, with one three month extension permitted. The City of Rochester, New York's zoning has a section on temporary uses which require approval of the Director of Planning and Zoning and issuance of a Certificate of Occupancy. Sections of these three codes are reproduced in their entirety at the end of this chapter, noted as items A, B, and C in the appendix.

Recommendations:

It is recommended that a new section of the zoning code on temporary uses be prepared. Such a section should include construction-related temporary uses as

of right, for periods of 18 to 36 months, depending on size of the construction project, seasonal uses, and temporary trailers on the same parcel with one-family residences, with strict conditions for their approval. New Castle County already allows for renewal of temporary uses by the Director of Planning; this power should be retained and defined in the code.

4. Standards and Definitions

The structure of many zoning ordinances lacks clarity in definition of terms as they relate to granting of variances and special exceptions. Planners, citizen board members, lawyers, developers, and more sophisticated neighborhood groups have an understanding of what is meant by an "area variance", a "use variance" or a "special exception" (special permit). Some of these actors are aware of the concepts of unnecessary hardship and practical difficulty. However, when cases are challenged in the courts after zoning hearings and board decisions, the tests of the boards' decisions frequently rise or fall on the ability to define and measure these terms. General standards for granting any of the forms of relief from a zoning code (use variance, area variance, special permit) include such concepts as lack of undue adverse impact on adjoining properties and uses, inability of the parcel to be developed for a permitted use or with required area and bulk dimensions, need for the service in the community, at that particular location rather than another location, etc. But in addition to these standards which should be present for granting of any of the forms or relief, there should be specific standards related to each type of variance and special exception.

Pages included in applications for area variances and for use variances in Rochester, New York are included as Appendix D. These pages indicate specific standards required for granting variances, and require the applicant for a variance to respond directly to each standard for that type of variance. Such clarity of standards is useful for the applicant, the Board, and for court action if a decision of the Board is challenged.

New Castle County's code does not currently define types of variances or the burdens of proof for these variances. While in common practice, the Board of Adjustment members and staff are likely to recognize the types of variances that refer to area requirements in the code and those that refer to use requirements, formal recognition of these distinctions would strengthen the ordinance. For example, referring back to Chart I, the first four columns, lot width, front yard, rear yard, side yard, and lot area, refer to area requirements. In addition, signage areas and parking space requirements can effectively be grouped under the area requirements. The remaining columns refer to use variances and special exception cases: temporary trailer, use variance, temporary use variance, conversion to two-family use.

It is recommended that the terms "use variance", "area variance", "unnecessary hardship", and "practical difficulty" be defined in the code, either in the definition section, or in the section on the Board of Adjustment. Major concepts that should be included in the definitions follow:

Use Variance: A variance of any provision of the code relating to uses of land or structures which are permitted or specially permitted in any district.

Area Variance: A variance of yard, bulk, space or height requirements, including the limited discretion given to the Director of Planning to grant administratively according to the provisions of this zoning code. Also, any waiver of required parking, loading, or other service areas related to the principal use of the subject lot or parcel.

**Unnecessary
Hardship:**

Strict application of the provisions of the district regulations would result in the inability to utilize the subject properly for any of the permitted or specially permitted uses. The hardship must be related to the unique circumstances of the property, must not be self-created, and must be shown by specific facts.

**Practical
Difficulty:**

Unique physical condition exceptional as compared to other lots or parcels in the district, due to unique physical condition, such as pre-existing use, irregularity of parcel shape, shallowness or narrowness, substandard or marginal size, exceptional topographical features. Such features must be of such consequences as not to be merely inconvenient, must not be self-created, and the carrying out of the letter of the code would result in denial of substantial rights to use the parcel for a permitted or specially permitted use.

5. Procedures.

In addition to streamlining the Board of Adjustment operations by amending often-varied sections of the zoning code and thus reducing their caseload of minor revisions and temporary uses, organizing their procedures at hearing and deliberation sessions can be undertaken. A significant way to organize deliberations is to prepare and use tally sheets of specific standards for granting variances and special exceptions; this, of course depends upon the existence of clear and meaningful standards for variances and each of the special exception uses. In recent years, courts have been increasingly demanding of municipalities to employ objective standards for granting or denial of variance and special exception applications, and to provide written findings related to these standards to support their conclusions.

Upon adoption of specific definitions for the major categories of variances and burdens of proof, findings for decisions of the Board may be done on tally sheets which identify the type of variance sought, the hardship or practical difficulty claimed by the applicant, and notations may be made for each of the demonstrations of proof of that type of hardship. Then, written findings may be drawn up from the review of the tally sheet(s). The tally sheets would also list the general conditions for granting a variance or special exception: that the proposed use or structure would not be materially detrimental to the public health and enjoyment of other properties in the vicinity, that the use or structure would not substantially increase traffic congestion, would not overburden existing public utilities, nor cause neighboring properties to be less valuable and useful for their highest permitted use, and that the use or structure would be in harmony with the purposes and intentions of the comprehensive plan. The review sheets developed for variances and special

permits in Rochester, New York are included as an example of this type of procedure and are included as Item E in the appendix.

6. District Boundary Lots; Transitional Uses

Concern has been expressed over the extent of authority of the Board of Adjustment over extensions of uses beyond district boundary lines into more restrictive districts. One way of dealing with this problem, is, of course, to require application for amendment of the district boundary, with concomitant legislative proceedings.

Another approach would be to include a list of permitted uses for district boundary lots, with special standards for treating the design of such uses so as to have a minimal adverse impact on adjacent uses usually residential. Parking of automobiles is generally considered an acceptable "transitional" use between commercial, industrial or office and residential uses. The code could be amended to permit transitional parking for the first 100 or 200 feet beyond the zoning boundary, subject to setback, screening and landscaping requirements. The parking lots so permitted should be limited to the parking of automobiles, and should not include loading facilities or areas for service vehicles. Offices and/or quiet, non-odorous research facilities may also be considered acceptable as transitional uses.

Some zoning ordinances have provisions that allow boundary lots to be used for any of the uses permitted in the next less restrictive zoning district, subject to setback and bulk regulations of that district. If the existing districts can be thought of as a hierarchy of uses from the most restrictive R-1 to the least restrictive M-3, boundary lot rights to more intensive uses would accrue to lots where the adjacent district is two or more districts up in the hierarchy. The hierarchy in New Castle County's existing code is: R-1, R-2, R-1-C, R-1-CC, R-3, R-4, O-1, O-2, C-1, C-2, C-3, M-1, M-2, M-3. If a lot zoned R-2 were the last lot adjacent to a C district, then the first 100 feet of the lot could be used for a use in the R-3 district list. Conversely, lots on boundary locations adjacent to more restrictive districts could be restricted, for their first 100 feet, to uses which are permitted in the first more restrictive district. Wording would be as follows:

District boundary lots bordering less restrictive districts. In any case where a district boundary lot has a lot line in common with a lot in a less restrictive district which is not the next less restrictive district, or is across a right-of-way from a lot which is not in one of the next two more restrictive districts, then the lot may be devoted to a use permitted in the next less restrictive district, subject to approval of the site plan by the Director of Planning or his designee and subject to limitation of the use to the first 100 feet from the district boundary line.

District boundary lots bordering more restrictive districts. In any case where a district boundary lot has a lot line in common with a lot in a more restrictive district which is not the next more restrictive district, or is across a right-of-way from a lot which is not one of the next two more restrictive districts, the lot shall, for a distance of 100 feet from the zoning boundary line, be subject to all of the regulations of the next more restrictive district.

An example of the use of this provision is illustrated below. The properties zoned C-2 would be limited to C-1 uses for the rearmost 100 feet of the lots, where they have common lot lines with residential rear yards. Accessory uses, such as parking, normally permitted in the C-2 district, would be permitted.

7. Special Exceptions (Special Permits)

The terms "special permit", "special exception", "conditional use permit", and "special-use permit" are all considered synonymous; the implications of the term "special exception", however, are more restrictive than the other terms, which tend to indicate that the use in question is permitted, but requires special treatment. That New Castle County's code employs the term "exception" may not be reflective of the generally permissive attitude toward development proposals and uses so listed; indeed, except for day care, none of the special exception cases heard in the 1981 year were denied. Switching to one of the other terms should be considered.

Recent trends in zoning legislation have included some interesting new uses of special permits, including the control of growth and the introduction of requirements for special amenities on the site of proposed special permit uses. Most zoning ordinances which were reviewed in the preparation of this report lack a specific definition of special permits or special exceptions. By defining the term an ordinance gives clarity to the fact that these uses are considered compatible with the districts in which they are listed, but require attention to details or conditions that will make the uses good neighbors for nearby properties. It is recommended that the term "special exception" (or "special permit") be defined in section 23-85. Suggested wording is as follows:

Special exception (permit) uses are those uses having some special impact or uniqueness which requires a careful review of their location, design, configuration and special impact to determine, against fixed standards, the desirability of permitting their establishment on a particular site. They are uses which may or may not be appropriate in a particular location depending on evaluation, in each case, of the public need and benefit against the local impact and effect.

Increasingly, revisions of ordinances have sought to add more specific standards for the granting or denial of special permit applications. Availability of necessary utilities such as water, sewer, public roads, etc. is a practical standard, and this standard has been used in some municipalities to control the growth of the community. The town of Ramapo, New York requires that all new residential development be approved through a special permit process; their provision was challenged but was upheld by the highest court in that state. Among the considerations are the adequacy of school facilities and fire fighting equipment in the area.

A. Special Exception (Special Permit) Standards

A brief review of the standards for each special exception in the code was undertaken. Most of the uses have adequate special controls, but there are some opportunities for improvement. The following standards may be considered as additions to the code standards under the uses listed:

Country Club, Golf Course:

- Any lighting shall be fixed so as not to glare in the direction of adjacent residentially zoned or utilized properties.
- Parking and loading facilities shall be screened and/or set back a

minimum of 10 feet from adjacent residentially zoned or utilized property. (See also recommendations in Chapter 6, Off-Street Parking.)

- Golf or any other active outdoor recreational facilities (tennis, swimming pool, etc.) within 200 feet of adjacent residentially zoned or developed property should be operated only during daytime hours.

Sub-station, electric and gas:

- Any equipment designed for exterior placement on the site must be adequately screened from view by fencing, evergreens, walls, or a combination thereof, and dangerous equipment adequately fenced from unauthorized entry.

Mink and Fox Farms:

- Fencing is required to positively contain the movement of animals within the property.

Day care centers:

Outdoor play space required per child (50 square feet) is small compared to other communities' codes; 100 to 200 sq. ft. is common.

- Outdoor play space of at least 100 square feet per child should be provided.
- Outdoor play activity areas shall be separated from adjoining residential property by a minimum of fifty (50) feet or by a buffer sufficient to ensure visual and auditory privacy to the residential properties.

B. Zoning Administrator/Hearing Officer Approach to Special Permit Processing

In recent years, a number of ordinances have been developed which place the responsibility for hearing special permits in the hands of a staff administrator.* This approach does, of course, remove special permits or special exceptions from the caseload of the Board, but the hearing process is maintained, allowing for public testimony. Cases are decided based upon a tally of points related to the specific criteria for granting each type of special exception use and on the general standards for all uses. Due to the relatively small number of special exception uses heard by the New Castle County Board of Adjustment, it does not appear to be necessary to set up such new administrative procedures. If the load of special exception cases increases considerably in the future, however, this approach may be highly desirable.

* The following communities have hearing examiners who decide on special permits, special exceptions, or conditional uses: Anne Arundel Co., Maryland; Xenia, Ohio; Seattle and Tacoma, Washington; Portland and Eugene, Oregon.

8. Structure of Fees for Zoning Applications

A review of subdivision and zoning fees undertaken by the Planning Advisory Service and a survey of planning officials involved in administering such fees

yielded a good cross-section of approaches to fees. Most municipalities charge flat fees for zoning variances, zoning amendments, and special permits. Where there are variable fees, they are related either to the costs associated with processing that type of application or to the intensity of the proposed use (or the number of dwelling units proposed). In cases where the municipality is attempting to recoup costs, generally only 10%-60% may be recouped through zoning fees.

The ability to charge zoning and subdivision fees has been reviewed and upheld by the Courts, and is generally accepted by the development community. Care should be taken to see that the fees are fair and consistent, that they relate to what is charged in neighboring areas, and what the traffic will bear. Proposals requiring a two- or three-step review and hearing process may logically carry a higher fee.

New Castle County employs the variable fee approach with higher fees for variances in commercial and industrial districts, but there is not a clear relationship between proposed uses and/or their potential profitability and the fees assigned. Office, commercial, and manufacturing uses generally require greater construction cost and reap profits uncharacteristic of residential development; it would be more logical for the application fee to relate to proposed use rather than the district the proposal is located in.

The range of fees is quite wide, and without any clear pattern based upon the scale of the proposed development, its potential profit or difficulty of approval process. For example, special exceptions for temporary uses or signs cost \$35.00 each, while special exceptions for tourist homes in R-2 are \$500; many other special exception uses carry \$200 fees. If the differences between fees were less, the choices of which uses should be charged which fees would be less difficult. Consideration should be given to raising the lowest fees while lowering the highest fees. The highest fee, \$1000 for "large residential developments" appears to be for a review of development where the process is almost the same as a Planned Unit Development (P.U.D.), and perhaps the fees should be identical.

To simplify the fee structure, uses charged certain fees should be listed specifically, under categorical headings. An example follows:

	<u>Fee</u> (suggested)	<u>Fee</u> (Existing)
Temporary uses and temporary signs	\$ 50.00	\$35.00
Administrative Area Variance	50.00	----
Residential and Related Uses:	50.00	
o Variance of area requirements	"	35.00 *
o Appeal of residential boundary or administrative decision	"	100.00
o Special Exception for: Day Care, Kindergarten, Preschool, Orphanage, Conversion, etc.	"	50.00
Non-residential uses in Residential Districts	500.00	200.00
o Golf course, country club, mink or fox farm		or
"similar uses", electric or gas substation, nursing home, hospital, sanitarium		500.00

Commercial Uses	500.00	200.00
o Telephone office, radio or television tower,		or
gas station in C-1, outdoor theatre, bowling		500.00
alley, pool hall, skating rink, etc.		

Manufacturing uses	500.00	500.00
o Heavy industrial uses in paragraph (3)		
of section 23-36.		
o Materials excavation pit		

* in residential districts

Some apparent contradictions or confusing points in the fee schedule should be noted. A temporary sign special exception is listed as \$35.00, while Section 23-85 (1)(O), for a temporary sign is \$200.00. The fee for a special exception to extend nonconforming use, Section 23-85 (1)(n) is \$200.00, while the fee to continue a nonconforming use, Section 23-85 (1)(m), is \$500.00.

The most direct way to streamline and simplify the zoning fee schedule is to utilize flat fees rather than varied fees. For example:

Administrative Area Variance (by Director)	\$ 50.00
Regular hearing - Board of Adjustment	\$100.00
Temporary Uses	50.00
Special Hearing -Board of Adjustment	1000.00
Regular Meeting - County Planning Board	100.00

9. Caseload of the Board of Adjustment

The Board heard 307 applications in 1981, or an average of 25.6 cases per month. The distribution of this caseload was not equal throughout the year. Looking at Chart 2 below, we find that the caseload was low during the first four months of the calendar year, about average in May, June, and December, and higher in the five months between July and November, inclusive. Only in three months, however, did the Board need to meet more than twice. These were months in which there were "special hearings" for which applicants paid the \$750.00 fee to have the privilege of a hearing with the Board apart from their regular schedule. As the Board members are remunerated for their attendance at meetings, and have the right to set dates for special meetings, these should not be considered an undue burden on the Board. Overall, the schedule of meetings corresponds in part to the vicissitudes of the construction season cycle, and does not appear to be unnecessarily rigorous. No change is recommended in the number of meetings for the Board; adoption of some of the recommendations for making some regulations less restrictive given earlier in this section should aid in shortening the length of the meetings by reducing the number of cases at each meeting.

CHART 2

Board of Adjustment - Caseload by Meeting - 1981

Month	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dates	8	12,19,* 20*	12	9,23*	14,21* 22*	11,18	9,23	13,27	10,17	1*,8, 15,22*	12,16	10
No. of Hearings (total)	9	16	19	13	26	27	37	35	41	28	31	25
* Special Hearings												

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§ 115-89. Temporary uses.

- A. Authorization. Except as otherwise expressly provided in this section, temporary uses are permitted in any zoning district subject to the standards hereinafter established and subject to the issuance of a certificate of occupancy as hereinafter required.
- B. Definition. A temporary use is one established for a fixed period of time with the intent to discontinue such use upon the expiration of such time. Such uses do not involve the construction or alteration of any permanent structure. No use expressly permitted or permissible as a permanent or temporary use in any district pursuant to the provisions of this chapter shall be allowed as a temporary use in any other district.
- C. Certificate of zoning compliance required. No temporary use shall be established unless a certificate of zoning compliance evidencing the compliance of such use with the provisions of this section and other applicable provisions of this chapter shall have first been issued, as provided in § 115-24 of this chapter.
- D. Particular temporary uses permitted. Subject to the specific regulations and time limits which follow, and to the other applicable regulations of the district in which the use is permitted, the following temporary uses of land are permitted in the zoning districts herein specified:
 - (1) Mobile homes: In any district as a temporary residence during the reconstruction of a dwelling unit damaged or destroyed by any means not within the control of the owner of such dwelling unit. Such use shall be limited to the period of such reconstruction, and in any event no longer than twelve (12) months following such damage or destruction. No such use shall be undertaken unless such mobile home shall have first been properly connected to city water and sewer lines and to all required public utilities.
 - (2) Indoor and outdoor art and craft shows, exhibits and sales: in any Commercial or Manufacturing-Industrial

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District; and, subject to proper approval of the park authorities, in any public park in a Residential District. Such use shall be limited to a period not to exceed five (5) days.

- (3) Christmas tree sales: in any Commercial or Manufacturing-Industrial District; and in any Residential District on property owned by any not-for-profit group or organization when conducted by such group or organization and when approved by the Director of Zoning on the basis of the adequacy of the parcel size, parking provisions and traffic access and the absence of undue adverse impact on other properties in the Residential District. Such use shall be limited to a period not to exceed sixty (60) days. Display of Christmas trees need not comply with the yard and setback requirements of this chapter, except that no tree shall be displayed within thirty (30) feet of the intersection of the curblines of any two (2) streets.
- (4) Contractors' offices and equipment sheds containing no sleeping or cooking accommodations: in any district when accessory to a construction project. Such use shall be limited to a period not to exceed the duration of such project.
- (5) Real estate offices containing no sleeping or cooking accommodations unless located in a model dwelling unit: in any district when accessory to a new housing development. Such use shall be limited to the period of the active selling or leasing of dwelling units in such development.
- (6) A carnival or circus: in any Commercial or Manufacturing-Industrial District; or in any Residential District on property owned by any not-for-profit group or organization and when approved by the Director of Zoning on the basis of the adequacy of the parcel size, parking provisions and traffic access and the absence of undue adverse impact on surrounding properties in the Residential District. Such use shall be limited to a period not to exceed

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twenty-one (21) days. Such use need not comply with the front yard requirements of this chapter except that structures or equipment which might block the view of operators of motor vehicles on the public streets shall not be located within thirty (30) feet of the intersection of the curblines of any two (2) streets. Such use need not comply with the maximum height requirements of this chapter.

- (7) Other temporary uses found by the Director of Zoning to comply with the provisions of this section.
- E. Bulk regulations. Except as expressly provided otherwise in Subsection D above, every temporary use shall comply with the yard, space and bulk regulations applicable in the district in which such temporary use is located.
- F. Parking. Before approving any temporary use, the Director of Zoning shall make an assessment of the total number of off-street parking spaces which will be reasonably required for use, on the basis of the particular use, its intensity, and the availability of other parking facilities in the area, and shall approve such temporary use only if such off-street parking is provided.
- G. Use limitation. No temporary use shall be operated during any hours or on any days of the week except such as are designated by the Director of Zoning in the certificate required by Subsection C of this section on the basis of the nature of the temporary use and the character of the surrounding uses.

SECTION 28.0 SPECIAL EXCEPTIONS (Continued)

it deems necessary, including, but not limited to, provision for additional fencing and/or planting or other landscaping; additional setback from property lines; additional parking space; location and arrangement of lighting; and other reasonable requirements.

28.338 Temporary Structures

In any residential zone, a temporary structure, including wayside stands for the sale of farm products grown or produced on the premises, temporary tool sheds, or contractor storage buildings in connection with a construction project, and temporary real estate signs. No wayside stand shall be less than twenty-five (25) feet from the nearest edge of roadway; and all display of goods shall be at least twenty-five (25) feet from the nearest edge of roadway. In an R-55, R-35, R-20, R-18, or R-10 Zone, a temporary special exception for a wayside stand shall not exceed six (6) months. Temporary signs shall be governed by the provisions of Section 25.0. A temporary building, such as contractors office, taxi stand, and similar structure, occupied by workers, shall be equipped with sanitary facilities, unless otherwise available on the premises.

28.339 Theatre

In a C-1 Zone, a theatre

28.340 Tourist Home

In the R-R and R-18 Zones, a tourist home

28.341 Trailer Camps

In any R-R or C-2 Zone, a trailer camp may be established, subject to the following conditions:

- (a) The area of the proposed trailer camp be at least five (5) acres.
- (b) Every trailer, building, or other structure in such camp shall be located at least one hundred (100) feet from the center line of any street, road, or other public right-of-way bordering such camp and at least fifty (50) feet from the nearest boundary line of such camp.

SEC. T-1.3. EFFECTIVE DATE: AUGUST 29, 1976

Any provision of this Article to the contrary, notwithstanding, the temporary use or occupancy of a private trailer or house car shall be permitted under the following circumstances:

A. The private trailer or house car shall be for the temporary use and occupancy of an individual or group of individuals whose single-family residential dwelling has been so damaged by fire or by some act of God as to render the single-family residential dwelling uninhabitable.

B. The private trailer or house car must be placed on the same plot as the single-family residential dwelling which is being rebuilt or on a contiguous parcel.

C. To obtain a permit for the above-mentioned use, a verified application on a form furnished by the Department of Buildings shall be sworn to and filed by the applicant with the Department of Buildings, along with an application fee of \$50.00. Said application shall contain assurances that the following requisites shall be satisfactorily complied with:

1. Sanitary drainage systems shall be connected to a sewer or cesspool in a manner approved by the Department of Buildings;
2. No waste water shall be discharged on the ground;
3. The electrical system of the trailer or house car shall be connected to the available public utility lines and the installation thereof shall be approved by the New York Board of Fire Underwriters;
4. The water connections shall be made in a manner approved by the Department of Buildings.

D. Notwithstanding the provisions of the Building Zone Ordinance with respect to minimum yard requirements, in granting the permit the Building Inspector shall consider the rights of adjacent property owners so that there shall not be any unreasonable deprivation of light or of a reasonable use of adjoining property.

E. The Building Inspector is hereby authorized in the exercise of reasonable discretion to revoke any permit issued hereunder, if after due investigation he deems that the holder thereof has violated any provision of this ordinance or if the trailer or house car is being used in an unsafe manner. Written notice of said revocation shall be given by personal service or by certified or registered mail, return receipt requested.

F. The length of time a private trailer or house car shall be permitted to remain shall be six (6) months, with one three (3) month extension. A further extension shall not be permitted and it shall be mandatory that the private trailer or house car be removed at the end of the permitted period of time. If the private trailer or house car is not removed, there shall be a per diem civil penalty of fifteen dollars (\$15.) for each day that it remains beyond the permitted period of time. If the private trailer or house car remains for more than ten (10) days beyond the permitted period of time, the Commissioner of the Department of Buildings, or his representative, shall, after notifying the owner of said private trailer or house car by registered or certified mail, return receipt requested, cause the private trailer or house car to be removed. The expense of removal and any resulting storage charges shall be paid by the owner of the private trailer or house car and if said cost is not paid within ten (10) days, the Commissioner of the Department of Buildings may advertise for the public sale of the private trailer or house car in the official newspaper of the Town and sell the private trailer or house car to the highest bidder at a public sale. The monies realized from the sale shall be applied to any outstanding civil penalties and shall reimburse the Town for any expense incurred in moving and storing the private trailer or house car. Any excess monies shall be remitted to the original owner of the private trailer or house car.

Applicant's Statement of Practical Difficulty

FOR AREA VARIANCE APPLICATIONS

Applicant is to explain how the request conforms to each of the following requirements:

A. Unique physical conditions: The property is exceptional as compared to other lots subject to the same provisions by reason of unique physical conditions (e.g., position or size of structure, unusual topographical features, irregularly shaped lot. . .) _____

B. Not self-created: The unique physical condition(s) existed at the time of the enactment of the provision or was created by natural force or governmental action, for which no compensation was paid. _____

C. Denied substantial rights: The strict application of the provisions would deprive the owner of substantial rights enjoyed by owners of other properties subject to the same provisions. _____

D. Not merely special privilege: The hardship is not merely the inability of the owner to enjoy some special privilege or additional rights not available to owners or occupants of other properties. _____

- E. Essential character of the area - surrounding uses and facilities:
The granting of the variance will not be materially detrimental to the public welfare or injurious to the enjoyment, use, or development of neighboring properties. _____

- F. No other remedy: There is no means other than the requested variance by which the difficulty can be avoided or remedied to a degree sufficient to permit a reasonable use of the subject property. _____

- G. Minimum relief: The application is for the minimum variance necessary to overcome the practical difficulty. _____

APPLICANT'S STATEMENT OF UNNECESSARY HARDSHIP

FOR USE VARIANCE APPLICATIONS

Applicant is to explain how the request to each of the following requirements:

A. No reasonable return: The subject lot or parcel is not capable of yielding a reasonable return if used for its present use of developed, redeveloped or used for any other use permitted or specially permitted in the district in which such property is located. Such inability to yield a reasonable return must be shown by specific fact, and not the unsupported opinion of the owner or those appearing for him. _____

B. Unique circumstances: The inability to yield a reasonable return results from unique circumstances peculiar to the subject property which do not apply to or affect other property in the immediate vicinity that are subject to the same regulations. The personal situation of the owner shall not be considered a unique circumstance. _____

C. Not self-created: The inability to yield a reasonable return is not the result of any action by the owner or his predecessors in title. _____

Appendix D.

- D. Essential character of the area--surrounding uses and facilities:
The granting of the variance will not be materially detrimental
to the public welfare or injurious to the enjoyment, use or
development of neighboring properties.

- E. No other remedy: There is no means other than the granting of the
variance by which the property can yield a reasonable return.

- F. Minimum Relief: The application is for the minimum variance
necessary to yield a reasonable return.

AREA VARIANCE

PRACTICAL DIFFICULTY

1. Unique physical condition:
2. Unique condition not self created:
3. Denial of substantial rights:
4. Not special privilege:
5. Variance not detrimental to public welfare & neighboring properties:
6. No other remedy:
7. Minimum relief:

USE VARIANCE

UNNECESSARY HARDSHIP

1. Lack of reasonable return:
2. Unique circumstances:
3. Hardship not self created:
4. Variance not detrimental to public welfare & neighboring properties:
5. No other remedy:
6. Minimum relief:

Notes:

The evidence must establish that the following 6 standards have been met:

- (a.) That the proposed use is in harmony with the Comprehensive Plan, Zoning Ordinance, and Subdivision Regulations.
1. What does the Comprehensive Plan recommend?
 2. Will the introduction of the proposed use conflict with the plan?
 3. Are the use and site plan in conformance with the Zoning Ordinance?
 4. Are any variances required?
 5. Is a subdivision or resubdivision required?
- (b.) Undue or adverse effect upon:
1. Adjacent property.
 2. Character of the neighborhood ((comment on surrounding uses)).
 3. Will traffic conditions be aggravated?
 4. Will existing parking facilities be overburdened?
 5. Are utilities adequate to serve proposed use?
 6. Will introduction of use cause health hazards? Safety hazards?

- (c.) Will the proposed use dominate the immediate vicinity?
1. Are there similar uses in the area?
 2. Have all possible safeguards been taken to assure that adjacent properties are not harmed by the proposed use?
 3. Will the introduction of the use prevent neighboring properties from being used in accordance with zoning regulations? Will it make them less valuable?
-
- (d) That the proposed use will be served adequately.
1. Are there available services to provide for the addition of the use?
 2. If services are not available, has applicant agreed to provide them or make provision?
 3. Has applicant made contact with agencies that might assist in providing services?
-
- (e) That the proposed use won't damage.
1. Does the site plan propose demolition of structures? Landmarks? Regrading? Removal of trees or natural features?

- (f.) Are there special standards for this particular Special Permit? Have they been met?

In determining whether the evidence establishes that the standards have been met, the Commission must consider the following:

- (a.) To what extent is the proposed use desirable?
1. Is the proposed use at this particular location necessary to provide a service?
 2. Is the service in the interest of public convenience?
 3. Will the service contribute to the general welfare of the neighborhood or community?

- (b.) To what extent could public goals be met by locating the proposed use at another site? Would another area be more appropriate?

- (c.) To what extent have steps been taken to minimize any adverse effects on the immediate vicinity?
1. Through building design?
 2. Through site design?
 3. Through landscaping and screening?

CHAPTER 5

Office and Research Office Districts

1. Introduction

In 1973 New Castle County added two new classifications to the Zoning Code, known as O-1 and O-2, to provide for the construction of professional and administrative office complexes and a limited range of accessory uses relating to these offices. This classification responds to recently evolved development types, known as office parks and professional office developments. These uses had traditionally been incorporated within the commercial classifications and remain permitted uses within these districts.

Developers of these office facilities face slightly different problems from those of conventional commercial developments. One difference is that these facilities are less dependent upon visibility and prominent road frontage than retail commercial. They can be located, and operate successfully, on smaller arterial roads within areas which are not commercial. They have different, usually smaller, parking demand when related to the number of square feet of building area. They have the potential, due to the quiet, unobtrusive nature of these uses, to be integrated comfortably into residential communities.

The O-1 and O-2 districts are designed to take advantage of the characteristics of office and administrative activities by improving the standards of development through setbacks, landscaping and limitations on building coverage and thereby creating a district which has a wider choice of site options, now including some otherwise residential areas.

2. The Current O-1 and O-2 Regulations

1. Uses

The O-1 District uses are confined to professional and administrative offices such as physicians, dentists, lawyers, post offices and similar medium and small scale office uses. Further the list of permitted uses includes "laboratory, medical or dental when operated in conjunction with and in the same building as the professional office of a physician or dentist..."

The O-2 district permits all O-1 type uses and "Industrial research and development or testing laboratories including such uses as are necessary and customary to develop the results... into commercially marketable products; book or periodical publishing; motion picture producing; or manufacture of precision instruments such as medical, dental and drafting instruments ..." Further, the O-2 category adds schools, colleges and county clubs among a short list of non-office uses.

2. Special Controls

A major feature of the "O" District is that special plan approval by the Department of Planning "complying with its policies and standards". This site plan review is based, in large part, on a list of controls included within each district. These are summarized on the following tables.

TABLE 1

	O-1	O-2
Minimum Lot Size	20,000 sq. ft.	217,800 sq. ft.
Maximum lot coverage (Bldgs.)	20%	15%
Maximum Paved area	40%	40%
Minimum Distance between Bldgs.	35'	35'
Minimum Street Frontage	75'	75'
Minimum Open Area	40%	40%
Setbacks:		
Structures from street lines	40'	40'
parking from street lines	25'	25'
from street or lot lines		25'
Sideyards:		
minimum	15'	-
total aggregate	35'	-
landscaped strip buffering adjacent		
residential zoned ground minimum	10'	10'
widths		
approval of landscape plan	yes	yes
approval of subdivision plan	yes	yes

These controls are essentially identical except for the greatly increased minimum lot size in O-2 (5 acres) and the maximum coverage which is reduced to 15%. The two districts may be characterized best by their uses. O-1 sites have been typically developed as small complexes of one or two story professional offices, usually with direct outside access, in architectural character they are often small freestanding office buildings or one story clusters - surrounded by parking. The O-2 classification encompasses the larger office and research complexes not generally serving the public directly as would a dentist or lawyer.

The O-1 and O-2 Districts are relatively new and more qualitative concern has been shown in their design than in traditional commercial zones. This concern is manifested in several special features in the "O" districts, particularly by the high open area requirement and the paved area restrictions listed in Table 1, and by several special features in the approval process.

Two features, of the approval process, a "satisfactory landscape plan", reflecting the landscape screen requirements and the "subdivision plan approval", both reviewed by the Department of Planning to comply with its policies and standards", are designed to improve development quality. The mere fact that a landscape plan and an overall subdivision plan are required before approval tends to improve development quality by forcing early consideration of overall design issues.

3. Development Issues

1. Introduction

The review of O-1 and O-2 sites presently in-place revealed several problems which could be addressed through some refinement in the present regulations. It is appropriate to note that the quality level of the O-1 and O-2 developments

is generally well above average when compared to other commercial developments. Organizing these less noxious commercial uses into special developments which are more compatible with non-commercial uses is clearly workable. It should also be noted that some of the difficulties observed are the result of less than ideal developer behavior. It is possible to meet the "letter" of the regulation without meeting the "spirit" of the regulation. This is, and perhaps will always be, a difficulty facing planners and community leaders. It has not been possible to conduct methodical surveys of all O-1 and O-2 developments. Further, it was not possible to interview owners. The observations that follow are based on a survey of perhaps 20% of these developments in New Castle County.

2. O-1 Development Issues

Recent O-1 developments have been generally oriented to public contact, i.e. "retail" professional services. The small scale of the individual rental module, and the speculative quality of their construction together cast the character of the O-1 developments as much or more than the zoning regulations. O-1 developments in which problems have developed appear likely to have been speculatively constructed "professional buildings", they usually have more than one or two floors, and have minimal perimeter landscaping. Open space usually consisting of small strips around the principal structure. In some cases, isolated, unmaintained ground at the rear of the site serves as the main "open area". In some instances, serious problems have developed with property maintenance and an appearance suggesting incipient "blight and abandonment" has developed.

We believe the County may be able to avoid these problems a higher percentage of the time if the developments are larger. A 20,000 square foot minimum site permits a development with the following characteristics:

Table 2

O-1 Site Development

Site Area:	20,000 Sq. ft.
Building Footprint (Maximum):	4,000 Sq. ft.
Parking Area (Maximum):	8,000 Sq. ft. (25 spaces)
Floor Area (Maximum):	5,000 Sq. ft. (based on parking)

Medical and legal professionals with individual practices can often function in offices of less than 1,000 sq. ft. Therefore if a code minimal structure is built only four to seven tenants will be required, maybe less, if they include group practices.

The effect of permitting small developments must be seen in business terms. Two or three medical professionals may pool their resources under a corporate umbrella to build themselves an office with few spare spaces for rental. This type of business decision is encouraged by the income tax laws which permit "losses" and interest payments to be deducted directly from total income. Such arrangements, especially in small scale developments, are inherently vulnerable to instability. It is very easy to misjudge the costs of maintenance or for problems maintaining full occupancy to develop. These problems can, in turn, lead to the visible decline of the building and, possibly, to its vacancy. Simply put, the problems observed within O-1 developments appears to stem from their size.

Larger O-1 developments, especially some of the newer clusters of one story medical and professional offices appeared to be generally better maintained and more attractive. We believe this results from the more deliberate management commitment which is required of a larger complex. Small developments having less than ten tenants will encounter difficulty in keeping full-time staff to organize and/or perform maintenance, the job will be conducted by parties with other primary concerns and quality will suffer in some cases.

Another area of concern is the quality of preserved open areas. The regulations for the "O" districts call for "open area" to be 40% of the site area. Open area is defined in the code as follows: "The portion of the lot excluding areas set aside or used for buildings, parking, loading and streets." It includes outdoor recreation facilities. Therefore all the miscellaneous ground in the development is "open area".

Some effort should be made to avoid creating unuseable, visually obstructed and therefore untreated portions of the site because neglect of these areas may follow. It is of course possible that portions of the site have interesting natural features such as large trees, swales, steep slopes or rock outcrops, and should be left undisturbed. It would appear that improved specification of the landscape plan could curtail this potential trouble area.

At present, the Subdivision Code, (Section 20-3) defines Landscape Plan as "A plan of ... land development showing the landscaping of all portions of the site which are not used for buildings,... structures, ... or parking spaces ... sidewalks ... to be prepared by an engineer, architect, landscape architect or land planner." This is quite clear, the landscape plan must encompass all undeveloped ground on the site. Therefore some guidance would be desirable specifically for O-1 and O-2 landscape plans.

3. O-2 Development Issues

The O-2 development type which has emerged in New Castle County is fairly large scale, usually well over the five acre minimum lot size (see Table 1). The tenants are often tenant/owners, usually in fee simple ownership of office/laboratory buildings and sites in O-2 subdivisions.

O-2 subdivisions are different from O-1 buildings both in appearance, especially in scale, and development issues. Problems which have appeared in the "O-1" district, such as neglected portions of development landscaping have also occurred in the "O-2" district, but the pattern of occurrence is different and the areas of ground are larger. In "O-2" the site is developed according to a master plan and sold in large lots to individual occupants who "built-to-suit" or to developers who build to rent, often speculatively (usually office). These occupants each inherit portions of the open area originally required in the O-2 plan, sometimes large portions. They may or may not actually have much concern for the exterior appearance as little "public contact" for the occupant may occur there. Naturally, in our observations conditions varied greatly, excellent efforts are made by some occupants while no effort is made by others.

While it was not possible to conduct interviews or perform extensive primary research the consultant would make several comments on present conditions in O-2 developments.

- o The development parcels which have poor landscape appearance were usually not treated at the time the structure was erected and occupied.
- o Sites where landscape material was installed in reasonable amounts are the most attractive areas of the development. This was particularly true in the few areas where "islands" of the older material on the site, such as clusters of trees, were integrated with new landscaping.
- o The installation of landscape material and the planning/preparation for it constitute a major expense, business occupants may not wish to bear this cost, in a retrofit, after the building is occupied. Delay is likely.
- o The relative cost of modest landscaping to building construction is very small and it is at the time of building construction that a commitment to this activity should be made.
- o Neglect of installed landscaping, which has occurred in some cases, cannot be effectively regulated through the zoning process. Some protection against extreme problems could be achieved by the development of covenants, deed restrictions, etc. similar to those in planned unit development rules. These were discussed in Phase I of the Zoning Code Update, Chapter VI.

4. Recommendations for Code Change

The following list of changes should be considered for the O-1 and O-2 districts. The adoption of these changes would reduce the likelihood that the identified difficulties would arise. Development quality will always depend in large part on the conscientious behavior of developers.

O-1 District

- o The minimum lot size should be increased, 40,000 square feet we believe would constitute an adequate increase to improve the opportunity to develop good project management.
- o The maximum lot coverage with buildings can be increased to 25%. This will encourage the one story, professional complexes with direct outside access. Keep in mind that the parking requirements are the real floor area size constraint and these should be retained.

O-1 and O-2 Districts

- o The minimum open area of 40% should be maintained subject to the approval of a landscape plan as at present. What should occur, however, is that the landscape plan approval be based on specific criteria. Landscape plan approval should be granted when the following conditions are met:
 1. All areas to the site have been addressed either by the installation of clearly specified landscape materials (as described in subdivision code - Appendix 13) or the preservation of existing material. If existing material is to be employed it must be identified as to types and location.
 2. Assurances are provided that the installation of the landscape material shall occur prior to, or simultaneous with the occupancy of the building.
 3. A landscape area a minimum of ten feet in width shall be provided along rear and side lot lines and a "landscaped frontage area" at

least 25 feet deep shall be provided along all public street frontage. Only approved driveways shall intrude into this frontage area. The landscaped frontage area may be decorative and need not provide a visual screen as at the side and rear lot lines.

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CHAPTER 6

Off-Street Parking Requirements and Design

1. INTRODUCTION

Off-street parking has been required in most zoning ordinances since their inception in the 1920's and 1930's. In the rapid automotive use growth era following World War II, codes became more detailed and sophisticated in their handling of off-street parking requirements for various uses. The off-street parking requirements in the New Castle County code have been reviewed in comparison with several other codes adopted or substantially revised in recent years, both for the number of spaces required for various uses and the design and dimensions of parking facilities. In addition, several other planning publications on the subject have been reviewed and concepts from these incorporated in to this chapter's recommendations.

General trends affecting parking demand in the United States are noted as follows:

- o Over the past 30 years, parking demand has risen as more families have moved to the suburban ring; two-car and three-car households have become increasingly common.
- o A cyclical but recurring trend toward compact and subcompact cars has been in effect for about 20 years, and is expected to continue through this decade. Federal authorities anticipate that 60 to 95 percent of autos in use in the U.S. in 1990 will be compact cars.
- o Occasional shortages in gasoline, and great increases in its price in the past several years have not seriously affected the demand for automobile ownership nor apparently produced any significant long-term effect on auto use for transportation to work or for shopping.

The major purposes for zoning controls requiring provision of off-street parking and dictating certain dimensions and design controls are:

- 1) To prevent and/or minimize traffic congestion in the public streets by providing an alternative to on-street parking.
- 2) To minimize interference between pedestrian and vehicular movements, both within and adjacent to areas devoted to parking.

An additional purpose which has been sought by some recent off-street parking controls is the enhancement of the appearance of street frontages.

Parking facilities serve differing functions and populations, and it is important to recognize the most common types of usage. Long-term parking for employees of commercial and industrial uses may be located farther from the buildings they serve and have narrower spaces than short-term parking intended for shoppers and visitors. Senior citizens and handicapped persons require wider spaces and close-in locations for parking. Parking facilities may be provided either in surface parking lots or garages. Parking structures are more expensive to build and maintain than surface parking, but offer the advantages of close-in location, covered parking, and more opportunity to control use of

the spaces.

In recent years, the level of sophistication of parking design and requirements has increased steadily. Most changes have had to do with landscaping and screening, signage, and redesign of existing lots and/structures for provision of a larger number of parking spaces for smaller cars. Research on usage of parking in large shopping centers has been undertaken by the shopping center development industry. More detail about these issues is provided later in this chapter.

2. NEW CASTLE COUNTY CODE REQUIREMENTS

1) Number of Spaces Required.

The factors used to determine parking space requirements include overall square footage of buildings, number of employees, dwelling units, seats, beds, sales areas, classrooms, and guest rooms. Several of these measures, specifically seats, beds, and employees, are variable over the economic life of a building, and may be difficult to assess and control by zoning administrators. The structure and organization of the parking requirements section are somewhat confusing. The standards are ordered by general use categories, but no sub-headings are present to introduce use categories, and some uses are listed apart from others in the same categories.

Chart 1, Comparative Parking Standards, following, compares the number of spaces required in five other communities for the most commonly listed uses to those of New Castle County. Examination of the chart reveals these concerns:

- New Castle County has no listing for senior citizen housing, which, if designed and operated for low- or moderate-income occupancy, generally requires much less parking than other residential uses.
- New Castle County's code frequently combines two measurement methods in the same use requirement. Most often this is a square footage-based standard and an employee-based standard. This is not common practice and is not easily administered.
- Wilkes-Barre and Philadelphia require certain amounts of paving in relation to the square footage of building. While this has been an adequate approach during decades of full-size car predominance, it is more questionable as the proportion of small cars in use is increasing.
- Both number of seats and square footage are utilized as measures for restaurants and bars. As noted earlier, the number of seats in facilities with moveable chairs is not closely controllable; other factors such as anticipated turnover, presence of live entertainment, or other types of amusement licenses are important but largely uncontrollable, and a square footage based measure is preferable.

COMPARATIVE PARKING STANDARDS

REQUIRED SPACES BY CATEGORY OF USE

Chart 1.

CATEGORY	RESIDENTIAL					INSTITUTIONAL					OFFICE	
	ONE FAMILY	TWO FAMILY	THREE FAMILY	MULTI-FAMILY	SENIOR CITIZEN	CHURCHES TEMPLES	SCHOOLS	HOSPITALS	FUNERAL HOMES	NURSING HOMES	BUSINESS OFFICES	MEDICAL/DENTAL OFFICE
1. NEW CASTLE CO. DEL.	1	1	1.5	1.5	—	1/5 Seats or 1/100' RW	5/Office + 1/Classrm. + 1/6 Seats (incl.)	1/3 beds + 1/100' RW	1/60 s.f. + 1/100' RW	1/4 beds + 1/2 Empl.	1/300 s.f.	1/200 s.f.
2. WILKES-BARRE PA.	1	1	1	1/100' RW + 1/500' RW	25 d.u. low income	1/6 Seats	1/2 Empl. + 1/15 Students	1/2 beds	5/Parlor	1/4 beds + 1/2 Empl.	1/300 s.f.	5/M.D. or D.D.S.
3. PHILADELPHIA PA.	1 ¹	1 ¹	1 ¹	1 ¹	3/10 d.u.	3	3	3	3	3	1/600 s.f.	3
4. KENT COUNTY MD.	1	1	1	1.5 plus 1/2 roomers	—	1/5 Seats	1/10 Seats in Assembly	1/2 beds	1/50 s.f. net	1/5 beds	1/400 s.f.	1/400 s.f.
5. ROCHESTER N.Y.	1	1	1	1/2 Studio or 1-B.R. + 1/3 B.R. + 1/3 B.R.	1/4 low income 1/3 moderate	1/5 Seats	1/3 Faculty 1/3 Staff 1/3 Students	1.8/bed	1/5 Seats	1/4 beds	3/1000 s.f.	4/1000 s.f.
6. TOWN OF OYSTER BAY N.Y.	2	3/2	2	2	3/5 d.u.	1/3 Seats	1/200 s.f. 1/50 s.f. Assembly	1/bed	1/50 s.f.	1/2 beds	1/200 s.f.	1/200 s.f. + 5/suite

COMMERCIAL														MANUF'G		CULTURAL/RECREATIONAL				
	RETAIL	BANKS	RESTAURANTS & BARS	FURNITURE & APPLIANCE	FOOD STORES	SHOPPING CENTERS	AUDITORIUMS & THEATERS	HOTELS/ MOTELS	WHOLESALE WAREHOUSE	INDUSTRY	LIBRARY/ MUSEUM	BOWLING	TENNIS	GOLF OR COUNTRY CLUB						
1.	1/200s.f. + 1/2 Empl.	1/200 s.f.	1/3 seats + 1/2 Empl.	1/400 s.f.	1/200 s.f. + 1/2 Empl.	5.5/ 1000 s.f.	1/4 seats	1 Room + 1/3 Empl.	1/2 Empl. + 1200 s.f. Sales	1/2 Empl. + 1200 s.f. Sales	1/400 s.f. 1/150 s.f. + 1/2 Empl.	5/alley	7/court	1/150 s.f.						
2.	1/300 s.f.	1/200 s.f.	1/2.5 seats	—	—	2-4 s.f. per s.f. of bldg.	1/4 persons at max. capacity	1/2 units 1/ unit	1/2 Empl.	1/1000 s.f. + 1/4 Empl.	1/250 s.f.	5/alley	—	—						
3.	2	2	2	2	2	2	3	3	1/500 s.f. 1/3700 s.f.	1/300 s.f. 1/1000 s.f.	3	3	3	3						
4.	1/200 s.f.	1/200 s.f.	1/100 s.f.	1/300 s.f.	—	—	1/5 seats	1/Room	—	1/2 Empl.	10 + 1/200 s.f. over 1000 s.f.	10/alley	—	1/5 members						
5.	4/1000 s.f.	16/1000 s.f.	5/1000 s.f. + 16/1000 s.f.	1.5/ 1000 s.f.	5/1000 s.f.	5.5/ 1000 s.f.	1/5 seats 1/60 s.f.	1/2 B.R.'s 1/ unit	—	1/2 Empl.	1/200 s.f. public area	5/alley	5/court	1/50 s.f. of Assembly						
6.	1/200 s.f.	1/200 s.f.	1/3 seats + 1/100 s.f. 1/250 s.f.	—	—	—	1/3 seats	1.25/Room	1/500 s.f.	1/300 s.f.	1/300 s.f.	6/alley	4.5/court	3/hole + 1/100 s.f. driving range						

- Footnotes: 1. Residential standards are per dwelling unit (d.u.) unless noted. Philadelphia has lower standard in Center City.
 2. No off-street parking is required in neighborhood commercial districts (C-1 through C-5). Other districts require paved area (parking plus drive aisles) to equal total of floor areas of building.
 3. Philadelphia's Code is unique in that it does not have a parking standards list by use; rather, various districts set forth the spaces required for all uses except residential in that district. In New Castle, drive-in or franchise restaurants require 25 spaces plus one for each 150 s.f.
 4. A separate requirement for drive-in restaurants in Rochester is 32 spaces per 1,000 square feet.
 5. For high schools. Lower requirements for elementary, higher for colleges and universities and technical schools.
 6. Listed as "linker and outdoor commercial recreation."

2) Design and Locational Criteria

The New Castle County Zoning Code requires submission of parking lot plans to the permit office (Section 23-63(4)). However, few of the concerns listed in the paragraph have specific standards defined. Review of other zoning codes indicates that most define standards for design and locational criteria within the zoning code.

Chart 2, Design Elements, shows which of the zoning codes reviewed had specific standards for various design concerns. Each of the newer codes reviewed had considerably more specific design criteria for parking than did New Castle's code. Of the other codes, those of Wilkes-Barre, Pa., Kent County, MD., and Rochester, N.Y. had the most detailed design requirements, and also had them grouped in a single location in the codes. These sections are reproduced in the appendix as examples for potential design standards. The Philadelphia and Oyster Bay, N.Y. codes diffused their parking design standards into various zoning district regulations, which is more confusing and less concise.

3. PROVIDING FOR SMALLER CARS

Both national and local studies indicate that the trend toward smaller car ownership is continuing. Many zoning codes have been amended in the past few years to accommodate this trend. One of the advantages of smaller cars is that more of the them may be parked in the parking bays existing in surface lots and in parking structures where the spacing of posts and beams does not prevent restriping for downsized cars. Typically, 25 to 30 percent more small cars may be parked in the same parking bay by narrowing the width of stalls and changing the angle of parking, as the smaller cars also have a tighter turning radius and can maneuver better into more highly angled spaces.

One method of combining compact spaces and full size car spaces, placing full size and compact spaces on the same aisle is a good example. Figure 1, the Drachman System of Parking, illustrates this spacing graphically. The same parking bay which can accommodate 18 standard size cars in 9 by 18 feet spaces at 60 degree angled parking can accommodate 28 compact cars in 7.5 feet by 15 feet spaces at 90 degrees to the drive aisle. Existing parking lots with one-way drive aisle patterns can be restriped to significantly increase the parking supply. A problem may arise in that locating a large number of small spaces in one area may cause some misuse, i.e., big cars in small spaces or vice versa.

Zoning codes which have been adopted to accommodate compact car spaces typically have a minimum number of spaces in the lot and allow as much as 25% to 30% of the spaces in the lot to be set aside for compact cars. However, such stalls must be clearly marked to prevent use by large cars.

The City of Philadelphia undertook a study of small car use, "The Trend Toward Compact Cars," Philadelphia City Planning Commission, published in 1981. That study indicated that small car ownership already amounts to 30 to 35 percent in the City, and is likely to increase in the future. The summary and recommendations of the report are reproduced following the Drachman System Figure. Comments on car size from The Dimensions of Parking which follow provide useful background to this discussion:

Car Size:

"A design factor in obtaining optimum space efficiency for both large and small vehicles involves the angle at which the vehicles are parked in relation to modular width. A module which will efficiently park the mix of large and small cars today at an angle of 60 to 65 degrees will also park the anticipated smaller vehicles of the future at an angle of 75 to 90 degrees. The change in angle parking as cars get progressively smaller, in conjunction with a decrease in stall size, could result in an ultimate increase in design capacity of 20 to 25 percent."

Chart 2

DESIGN ELEMENTS DESCRIBED OR DEFINED IN VARIOUS ZONING CODES

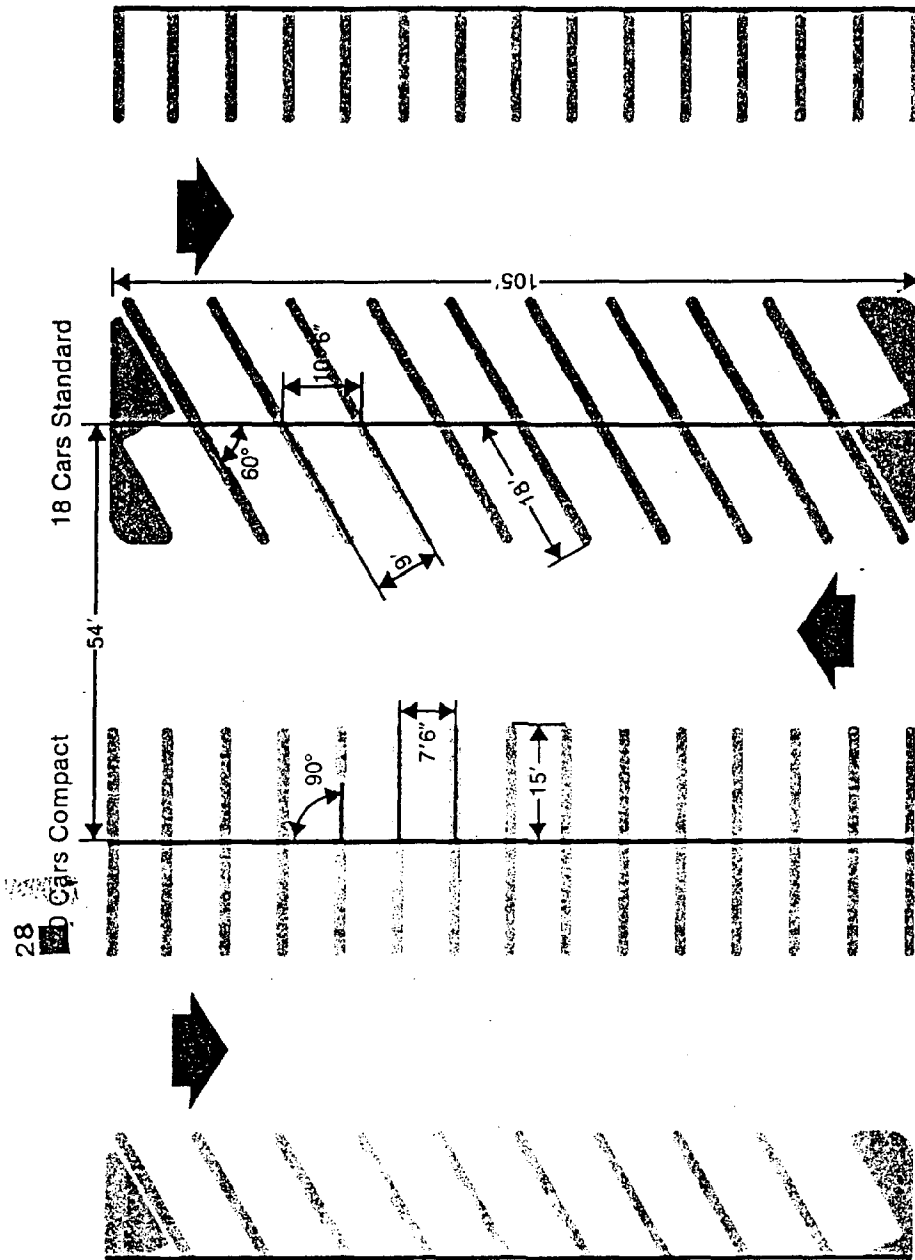
Design Element	New Castle County	Wilkes- Barre (1974)	Phila. (1962)	Kent Co. (1975)	Rochester (1975)	Oyster Bay (1971)
Driveway size 1 family	X ⁶	X			X	
Driveway size	X ⁶					
parking lot		X	X		X	
Minimum width						
- full size car	X	X	X ³	X ⁴	X	
- compact			X ³		X	
Minimum length						
- full size car	X	X	X ³	X ⁴	X	
- compact			X ³		X	
Surfacing requirement	X ⁶	X	X	X	X	X
Drainage requirement	X ⁶	X		X	X	
Screening from						
residential		X ¹		X	X	X
Lighting - non-glare		X	X	X	X	X
Landscaping at street				X ⁵	X	X
Setback from streets	X ⁷	X	X	X ⁵	X	
Setback from residential		X ²			X	X
Minimum aisle width	X	X		X		
Shared parking						
provision					X	
Maximum distance						
requirement	partial	X			X	
Car stops/barriers	X	X		X	X	X X
Maximum grade permitted	X ⁶			X		X

NOTES:

- 1 for all required yards in all districts
- 2 for dwellings and institutions
- 3 amended 1980 to reduce stall sizes; compact stalls must be approved by Zoning Board unless for valet parking lots.
- 4 size indicated as 200 square feet per space
- 5 or barriers
- 6 Subdivision Code - Chapter 20, New Castle County Code
- 7 Certain Zoning classifications only

Figure 1
Drachman System of Parking
(Small and large cars in one bay)

Comparison of Total Number of Spaces	
Drachman System	92
Normal System	72
Increase	20
Percentage Increase	29.16%



The Drachman System uses 90-degree angle spaces for small cars in the same bay in which 45- or 60-degree angle spaces are provided for large cars. This self-enforcing plan uses standard space stalls 8.5 or 9.0 feet by 18 feet, while compact spaces are 7.5 feet wide by 15 feet long within a bay width of 54 feet.

From "The Trend Toward Compact Cars" Philadelphia City Planning Commission, 1981:

Summary and Recommendations: Parking Standards

This City-wide survey addresses the advisability and feasibility of amending the Zoning Code to allow a percentage of required parking spaces to be less than 10' x 20' to accommodate today's smaller cars.

The findings confirm the ongoing trend towards compact car ownership within the City of Philadelphia. Also, the survey identifies and analyzes the patterns of compact car utilization throughout the City.

Data indicates that the trend in vehicular design offers an opportunity to advance the more efficient use of parking facilities.

The following parking standards are recommended for required parking provided on self-parking surface lots.

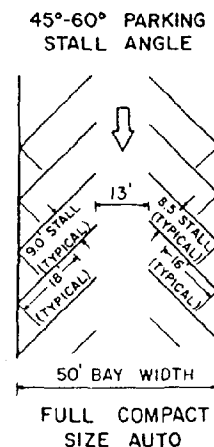
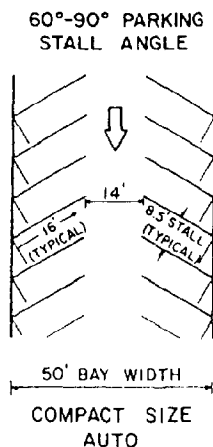
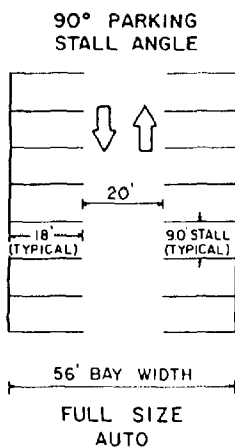
- A) Reduce the parking stall size from the current 10' x 20' to 9' x 18' dimensions, except for dwellings intended to be occupied solely by senior citizens, in new developments.
- B) Subcompact car parking stalls (as defined in Appendix B), being of 8.5' x 16' dimensions; shall be permitted under certain conditions for up to 25% of the total parking lot. In all cases, compact car parking stalls should be clearly marked as such.
- C) Space gained through the reduction of stall size, shall not be used solely for additional parking. A portion of this space could be used to create planted areas. It is not the intent of these modifications to permit additional space to allow for greater building coverage, or additional outdoor storage area.
- D) Spaces designated specifically for the elderly (i.e., senior citizen apartments) and the handicapped shall not be less than ten (10) feet wide. However, the depth of such parking stalls could be reduced to 18' for full size parking stalls and 16' for compact stalls.
- E) As part of the modification of revised parking standards it is further recommended that minimum driveway widths be adopted, such as those outlined in Table 1, below.
- F) For parking as a principal use, in a supervised parking structure, the 9' x 18' and 8.5' x 16' parking stalls could be further reduced where spaces are managed by the operator and parking of cars in appropriate sized stalls can be enforced. Reduced parking stall size coupled with reduced

driveway widths (See Table 1) shall be evaluated on a case-by-case basis consistent with the standards set forth above."

**TABLE NO.1 PARKING DESIGN CRITERIA
(TYPICAL STALL, AISLE & BAY DIMENSIONS)**

STALL SIZE ON EACH SIDE	PARKING STALL ANGLE							
	90°		60°-90°		45°-60°		LESS THAN 45°	
	AISLE WIDTH	BAY WIDTH	AISLE WIDTH	BAY WIDTH	AISLE WIDTH	BAY WIDTH	AISLE WIDTH	BAY WIDTH
9.0' X 18'	20'	56'	15'	54'	13'	49'	10'	44'
9.0' X 18'								
8.5' X 16'	20'	52'	14'	50'	12'	47'	10'	40'
8.5' X 16'								
9.0' X 18'	20'	54'	15'	53'	13'	50'	10'	42'
8.5' X 16'								

EXAMPLE:



4. SHOPPING CENTERS

Most zoning ordinances list shopping centers as a separate commercial use in their parking requirements. As shopping centers have represented such a large proportion of commercial development outside major cities, this subject merits special attention.

Shopping centers continue to be the most popular form of suburban commercial development because they provide a convenient mixture of products and services and because they traditionally provide ample free parking for patrons and employees. Several major nationwide studies have been done of shopping center parking facilities design and use. The most recent of these, Parking Requirements for Shopping Centers, (Urban Land Institute, ULI - Wilbur Smith and Associates, 1981) was reviewed for this report; this document provides an excellent reference on current standards for this use.

Shopping Centers are built in a wide variety of sizes and perform various functions. Sizes range from tiny plazas of small shops totalling 25,000 square feet or less to huge regional shopping malls over 1 million square feet. In recent years, business and professional offices, movie theaters, and restaurants have become increasingly common uses in larger shopping centers. The ULI report found parking space demand to differ somewhat for different size shopping centers, and also recommends that centers with large areas devoted to offices, cinemas, and restaurants should have different parking requirements based upon square footage devoted to those uses.

Three other important factors emerge from this report; summarized as follows:

- Restriping for compact cars in existing surface parking lots can achieve a net increase of 20 to 30 percent in the total number of spaces in the lot. Of particular interest is the Drachman system of parking stall layout, which combines compact car and full-size car spaces on either side of the same drive aisle (Figure 1).
- If more than 25% of shoppers and employees can be expected to arrive using other transportation modes (bus, train, on foot, etc.), then the number of parking spaces required can be reduced proportionally.
- Employee parking. 15 to 20 percent of parking space usage at peak demand hours is by employees. If a separate parking area can be established for long-term employee parking and use of this area can be enforced, then the main parking areas have additional parking capacity allowing additional square footage in the shopping center. Parking areas for employees may only need to be used at peak shopping seasons such as Thanksgiving to Christmas, Easter, and Mothers Day, according to some accounts.

5. SETBACKS, SCREENING AND LANDSCAPING

In the past decade, trends in zoning practice have included an increase in requirements for setbacks, screening, and landscaping of parking lots, generally commencing at a minimum threshold of 3 to 10 parking spaces. The purposes of such setback, landscaping, and screening requirements are as follows:

- to enhance the appearance of parking lots along the public right-of-way;

- to screen neighboring properties, particularly those devoted to residential and institutional use, from parking lots, giving them privacy, reducing glare, odor, and noise often associated with parking lots and their circulation elements;
- to prevent automobiles from crossing onto adjacent properties and causing damage to yards, landscaping or buildings; and,
- to provide clear separation of pedestrian and automotive paths, thus reducing potential safety hazards.

A latent functional benefit of such improvements, along with drainage, surfacing, car stops, curbing, and driveway improvements, is to oblige the owner to make a conscious decision to establish a parking lot on a permanent basis. These requirements tend to assist a community in avoiding the problems associated with haphazard, poorly executed and maintained parking lots which may be established as a temporary use while the land is held speculatively pending new development.

A word of caution is in order, however, concerning the costs associated with good landscaping and screening. Such improvements can add significantly to the cost of parking lot development; care should be taken in choosing landscaping requirements which are not excessively expensive.

The following excerpts from "Surface Lot Design", by Gerald R. Stocks, in The Dimensions of Parking, Urban Land Institute and National Parking Association, should help provide insight into some potential design standards. Reference is also made to the three codes in the appendix.

Design Efficiency:

"Maximum capacity is generally achieved by developing parking modules running parallel to the long dimension of the site. ... Experience dictates the desirability of keeping one or both ends of the northern parking facilities open to facilitate plowing of snow during the winter months."

Ingress and Egress:

"Driveway openings should not be located near street intersections, thus preventing friction with street traffic."

Construction Details:

"Concurrent with the sub-base work is the actual sloping of the area to ensure positive drainage and the installation of surface drains and drain lines."

(Landscaping) "...selected tree types should not have extensive root structure which could result in damage to paving."

"To insure proper safety and visibility, it is vital that the area 2 feet to at least 5 feet above ground be clear of growth except for tree trunks; cars and pedestrians will then be fully visible. High hedges and cone shaped trees with heavy growth reaching down to the ground should be avoided if they might interfere with visibility;

but such foliage can be used as a visual screen around the perimeter of the parking facility."

6. RECOMMENDATIONS

o Parking Spaces Required - General Organization

- 1) Requirements based on moveable objects (chairs, people, beds) should be replaced by requirements based solely on floor areas to the extent that it is practical, as floor area measurements are fixed over time and controlled by building permits.
- 2) General classifications for uses should be introduced as headings and uses regrouped where necessary to form a more cohesive and easier to reference parking requirements list. Suggested classification headings are: Residential, Commercial, Office, Institutional & Government, Recreational & Social, Industrial & Warehouse.
- 3) The ordering of sections should be as follows: Off-street parking: spaces required; Off-street parking: design and general requirements; Off-street loading: spaces required; Off-street loading: design and general requirements.

o Parking Spaces Required - Specific Regulations

- 1) A separate requirement for senior citizen housing should be established. One space per three dwelling units is suggested. Spaces for senior citizen and handicapped use have different dimensional requirements, discussed in the following section of this chapter.
- 2) Consideration should be given to a single square-footage-based measure for retail, restaurants and bars, food stores, libraries, museums, funeral homes, and nursing homes. Interior layout of such uses can be subject to change, with or without building permits, and the proportion of public to private space changed accordingly. Also, a single measure would be simpler to compute and less demanding of information from an applicant for a permit (who often does not have a direct connection with the eventual user). Suggested standards are as follows:

Retail: 1 space per 200 square feet

Restaurants, bars, and night clubs:

- o with live entertainment or dancing: 1 per 60 square feet;
- o without live entertainment or dancing: 1 per 200 square feet.

(NOTE: Proper enforcement of this provision would require that a referral be made from the department or agency issuing entertainment licenses. Such referrals would be necessary for new licenses only, not renewal of licenses which existed prior to the enactment of this recommended zoning code change. Also, separating live entertainment use parking requirements would require that restaurant and night club developers would need to decide whether or not live entertainment or

dancing would be included in advance or add to their parking facility when they added live entertainment. Allowing a portion of the parking to be on crushed stone or compacted earth may be workable in many cases.)

Food Stores: 1 per 150 square feet

Libraries: 1 per 300 square feet

Museums: 1 per 150 square feet

Funeral Home: 1 per 50 square feet.

o Parking Space Sizes

- 1) A separate space dimension for senior citizen and handicapped drivers should be established. Suggested dimension is 11 feet by 20 feet.
- 2) The standard car space dimension may be made slightly smaller and still be workable. Consideration should be given to changing to a 9 feet by 18.5 feet space. Each of the space lengths indicated in Section 23 - 63 (8) could be reduced.
- 3) Small car spaces should be defined and permitted up to 25% of the total in lots and garages of 40 spaces or more. This percentage can probably be adjusted upward in about 5 years' time. Suggested size of small car spaces is 8 feet by 16 feet.

o Parking Standards for Shopping Centers

- 1) The number of parking spaces required for shopping centers should be based on the overall gross leasable square footage and have adjustments for floor area devoted to office, cinema, and food service uses.
- 2) Recommended standards for shopping centers are as follows:
 - 4 spaces per 1,000 square feet of gross leasable area (GLA) for centers up to 400,000 square feet.
 - 4.5 spaces per 1,000 square feet of GLA for centers of 400,000 - 600,000 square feet.
 - 5 spaces per 1,000 square feet of GLA for centers over 600,000 square feet.
- 3) Required modifications if centers include offices, cinemas, and food services.

Offices. Office space in excess of 10 percent of GLA, add 1 parking space per 400 square feet of gross floor area of office over 10 percent GLA.

Cinemas. At centers of 200,000 square feet or less with cinemas seating over 450 persons, and at centers over 200,000 square feet with cinemas seating over 750 persons add 3 parking spaces per 100 seats.

Food Services. Food service space in excess of 10 percent of GLA requires 10 spaces per 1,000 square feet in centers of less than 100,000 square feet and 6 spaces per 1,000 square feet in centers of 100,000 - 200,000 square feet of GLA. No modification is necessary for centers over 200,000 square feet.

o Setbacks, Screening, Landscaping and Design Standards.

It is strongly recommended that specific standards for the design of parking facilities be adopted as part of the off-street parking requirements of the Zoning Code. Some standards are present in the sub-division code, they should be clearly referenced in the Zoning Code. Most strongly recommended are standards for design of the elements of a parking area and for the edge treatment where lots or garages are adjacent to residential or institutional uses, as follows:

1) Parking areas defined:

- A parking area is any land area designed, used, or intended to be used for the parking of five (5) or more automobiles.

2) Parking areas, design requirements:

- Surfacing. All parking lots and driveways shall be surfaced with a two-inch asphaltic or Portland cement binder, providing a durable and dustless surface, on top of four to six inches of compacted stone base and compacted earth.

(Note: Discussions with Planning Department staff indicates that there are occasions where the Director or his designee have approved crushed stone parking areas for certain low-traffic uses. A waiver provision should be included, with the Planning Department allowing a waiver based on predetermined principles or conditions.)

- Grading, Drainage. All parking areas shall be graded to a positive drainage system connected to a stormwater runoff system to eliminate standing water and damage to adjoining property and the public ways. Maximum permitted grade for any parking space, excluding access ramps, shall be five percent (5%).
- Lighting. Where provided, lighting shall be designed so as to prevent glare onto any public or private property or streets.
- Striping. Parking stalls shall be clearly marked with striping from four to six inches in width.
- Circulation. Driveways and internal drive aisles shall be designed to minimize conflicts with pedestrian paths on and about the site. Pedestrian ways will be clearly marked and separated to the degree possible, from automobile traffic.

(General Note: Where such design requirements are already described in the subdivision code, reference should be made in the zoning code.

3) Parking areas, edge treatment:

- Barriers. Car stops, bollards, pipe rails, curbing, or other suitable barriers shall be installed at the edges of parking areas to prevent the movement of automobiles onto landscaped areas, adjacent properties, public ways and pedestrian ways or sidewalks.
- Screening. A solid fence, masonry wall, compact evergreen hedge or other suitable screening device is required at every property line which separates a residentially or institutionally used or zoned property from a parking area. Such screening devices are to be a minimum of four feet in height to ensure visual privacy at ground level. Any required screening must be maintained by the owner of the parking area. (See Chapter 20 of the New Castle County Code - "Subdivision...Regulations" Appendix XIII).

Consideration should be given to including front, side and rear yard setbacks for parking areas in all districts, and including required landscaping elements in such setback areas in the zoning code. Such landscaped spaces may be permitted in lieu of screening devices at rear and side lot lines adjacent to residential uses, with setback depths of ten to twenty feet. Where used along the principal public right-of-way, landscaped open space depths would vary. In residential districts they should be the same as the required front setback, while in commercial, office, and industrial districts, they would more logically be shallower than the front setback required for a structure. A depth of 20 feet would be appropriate for front landscaped open space in commercial, office and industrial districts which are not adjacent to or across from residential or institutional properties.

Suggested wording for consideration is as follows:

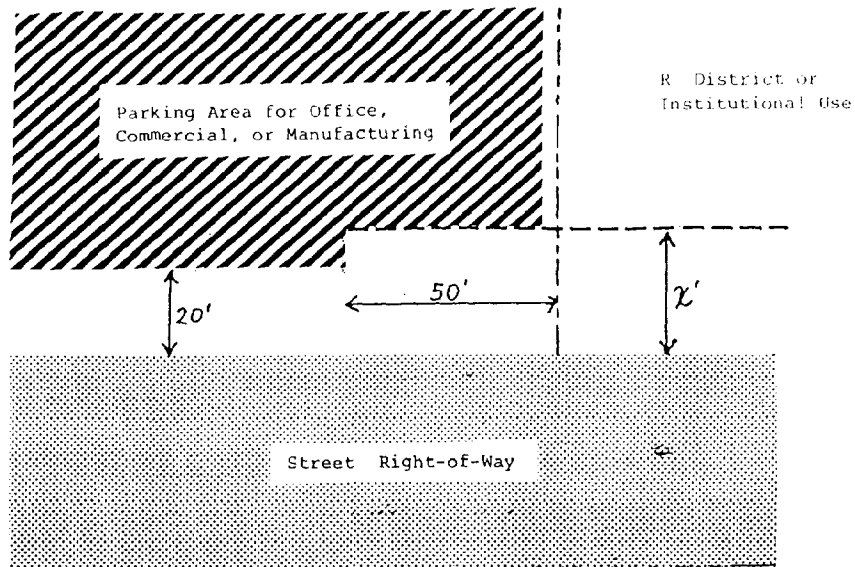
1) Front Landscaped Open Space Defined.

- A front landscaped open space is intended to enhance the appearance of parking areas along the public right-of-way. Such landscaped areas may be broken only by required driveways, and may be surfaced with grass, groundcover, or a combination and shall contain ornamental shrubs or trees, walls, or berms to create a partial screening and attractive decorative feature in front of parking areas. Signs otherwise permitted by the regulations of this code may be located within this space, but may not be located so as to obstruct vision of the street or sidewalk at points of access.

2) Front Landscaped Open Space Required Depth.

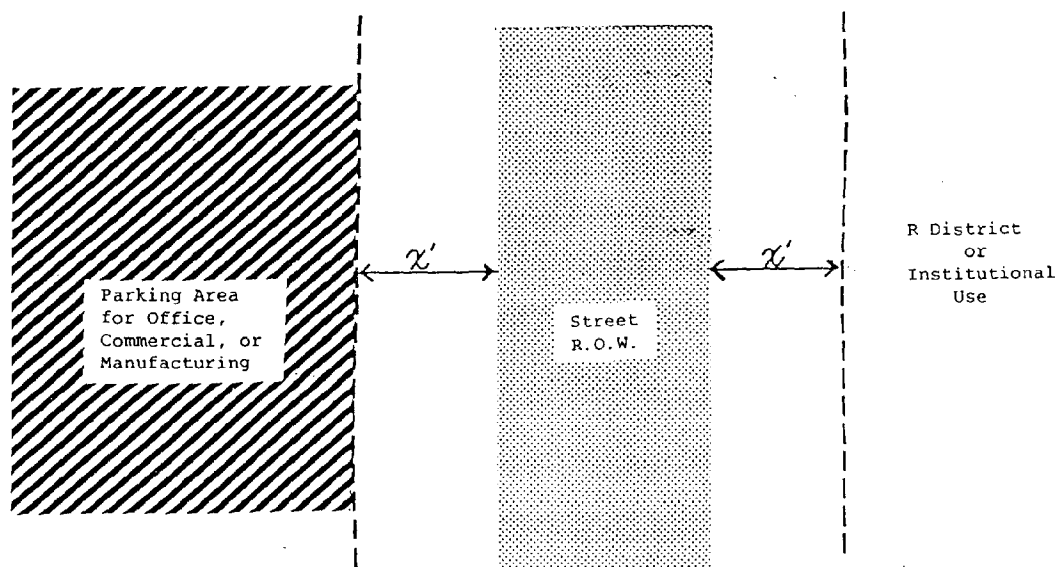
- (a) Whenever parking areas are developed in residential districts in locations where they are not screened by buildings on the site, the front landscaped open space shall be the depth of the required front yard.
- (b) In office, commercial or industrial districts which are neither adjacent to, within 50 feet of, nor directly across a public right-of-way from residentially or institutionally used or zoned property: twenty (20) feet.

FIGURE 2. FRONT LANDSCAPED OPEN SPACE. Suggested Treatment for Parking Area Adjacent to Residential or Institutional, Same Side of Street.



Where x' is the required front setback in the R District or the front yard of the institutional use.

FIGURE 3. FRONT LANDSCAPED OPEN SPACE. Suggested Treatment for Parking Area Across Street Right-of-Way from residential or Institutional.



Where x' is the required front setback in the R District or the front yard of the institutional use.

- (c) Where office, commercial or industrial parking areas are designed within 50 feet of residential or institutional uses or lands on the same frontage, or across a public right-of-way from such uses or lands, the front landscaped open space shall be the depth of the yard required for residential or institutional uses in the adjacent district (see Figures 2 and 3 which follow).

- o F. STANDARDS FOR LOCATION OF PARKING (MAXIMUM DISTANCE) AND SHARED PARKING

While it can be difficult to regulate the distance that parking may be located from the building in cases where facilities grow incrementally, effort should be made to see that it is near enough to be useful. Distances should be measured from the nearest entry door of an expanding commercial or industrial complex to the most distant parking spaces.

The standards for location of parking spaces, currently Section 23-63 (2), does not now but should include a maximum distance from the building or use for auditoriums, stadiums, ... or industrial, wholesale and manufacturing establishments and hospitals, where such spaces are for all-day and all-shift uses by employees. Recommended distance for all-day or all-shift use: maximum of 1200 feet from building or use. Recommended distance for auditoriums, stadiums, assembly halls, gymnasiums, and other places of assembly: 1,000 feet from building or use.

In Section 23-63(3), parking spaces for places of assembly may be the same spaces assigned to other uses which are not in operation at the time of events at the place of assembly. Where such shared parking arrangements may be workable, a recorded legal instrument defining the hours of operation of the two functions sharing parking must be approved by the County legal staff and the Planning Director, and recorded prior to issuance of permits for the principal use.

When parking required by the code is located on a parcel of land that is not legally joined to the parcel containing the principal use the parking is to serve, a recorded legal instrument reserving said lands for parking for that use must be approved by the County legal staff and the Director of Planning and subsequently recorded prior to issuance of permits for the principal use.

- o H MAPPING PARKING DISTRICTS IN TRANSITIONAL LOCATIONS

Parking for large scale commercial, office, and industrial uses can be a very good neighbor for residential and institutional uses, providing substantial buffering for the less intensive use from the more intensive neighboring use. The City of Rochester's zoning ordinance includes a separate district called "Transitional Parking". This district was developed, in part, to respond to concerns of neighborhoods threatened by the continuing expansion of large industrial uses which were buying up residential properties nearby, demolishing them, and gradually eating away at residential streets in a piecemeal and sawtooth pattern. The Transitional Parking District has also proved to be useful for rezonings, particularly those requesting more intensive commercial and industrial designations adjacent to

residential areas. In such cases, the T-P Transitional Parking District may be used for the portion of the site adjacent to residential districts, while the main portion of the development becomes zoned for commercial or industrial use. Provisions of the Rochester code describing the Transitional Parking District are duplicated as Appendix A. of this chapter.

References:

The Dimensions of Parking. Urban Land Institute and National Parking Association, 1979

Landscaping Guide, City of Rochester, N.Y., January 1978

Parking Requirements for Shopping Centers: Summary Recommendations
Urban Land Institute by Wilbur Smith and Associates, Inc., 1981

A Parking Standards Report, Volume I, for City of Los Angeles,
Parking Standards Design Associates, 1971

The Trend Toward Compact Cars: An Evaluation of Parking Standards
Philadelphia City Planning Commission, 1980

Zoning, Parking, and Traffic. Eno Foundation for Transportation, Saugatuck,
Connecticut, 1972

§ 115-80. T-P Transitional Parking District.

A. Purpose.

- (1) The T-P District is intended to provide compact areas to meet customer and employee parking needs of commercial and manufacturing-industrial uses while creating a transitional zone between such uses and nearby residential uses and avoiding the traffic and parking congestion and hazards in residential areas which frequently result from inadequate parking in neighboring nonresidential districts. The district is intended to prevent the expansion of industrial and commercial uses into their districts and, by requiring setbacks and landscaping, to assure attractive parking facilities that are compatible with adjoining residential uses.
- (2) It is to be expected that the district will find use in those areas where it is appropriate to provide for more manufacturing-industrial and commercial use parking adjacent to residential areas than can be accommodated in a transitional parking lot permitted as a special use pursuant to the Residential District regulations.
- (3) The district may be mapped independently or may be overlaid on any part or all of any district except a Commercial District or a Manufacturing-Industrial District.

B. Standard or overlay district. Subject to the limitations hereinafter set forth, the T-P District may be mapped upon the District Zoning Map, pursuant to the procedures for amending the District Zoning Map established by section § 115-26 of this chapter, either independently of any other district or in conjunction with any underlying district other than a Commercial District or a Manufacturing-Industrial District. When overlaid on another district, the T-P District shall provide optional regulations available in lieu of those applicable in the underlying district; provided, however, that any lot may continue to be used in accordance with the regulations applicable in the underlying

district in the same manner as though the T-P District did not exist.

C. Minimum district size and location limitations.

- (1) Minimum size. No T-P District shall be created having an area less than twenty thousand (20,000) square feet in one (1) contiguous, compact area.
- (2) Location. No T-P District shall be created unless such district abuts, or is directly across a street from, a C-2 or C-3 Commercial District, ^{T-P} or an M-1 or M-2 Manufacturing-Industrial District for a distance of not less than forty (40) feet.

D. Permitted uses. The following uses are permitted as of right in the T-P District:

- (1) Municipal parking lots and garages.
- (2) Public parking lots and garages.
- (3) Private customer and employee parking lots and garages.

E. Accessory uses and structures. Accessory uses and structures are permitted in the T-P District subject to the provisions of § 115-87 of this chapter.

F. Temporary uses. Temporary uses are permitted in the T-P District subject to the provisions of § 115-89 of this chapter.

G. Special permit uses. In addition to the uses specified in § 115-29E(1), the following uses may be permitted in the T-P District subject to the issuance of a special permit as provided in § 115-29 of this chapter and subject to the additional standards hereinafter set forth:

- (1) Automobile service stations, subject to the following additional standards:
 - (a) The use is located entirely within the structure of a parking garage.
 - (b) The use is clearly accessory and subordinate to the principal parking use.

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- (b) The use is clearly accessory and subordinate to the principal parking use.

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- (c) The use complies with all standards set forth in § 115-54G(1) of this chapter.
- (2) Auto washes, subject to the following additional standards:
 - (a) The use is located entirely within the structure of a parking garage.
 - (b) The use complies with all standards set forth in § 115-55G(2) of this chapter.

H. Space, bulk and yard requirements.

- (1) Maximum height permitted. No portion of a building or structure located in a T-P District and separated from the district boundary line by only a required yard or a right-of-way, or both, shall exceed the maximum height permitted in the adjacent district nearest to such building or structure. Any portion of a building or structure separated from all T-P District boundary lines by a distance greater than the aforesaid yard and right-of-way shall not exceed the maximum height permitted in the nearest district plus one (1) foot for each foot of said distance.
- (2) Minimum yard requirements:
 - (a) Front yards:
 - [1] Fronting directly on:
 - [a] An R District boundary line: lot, ten (10) feet; garage, twenty (20) feet.
 - [b] A C District boundary line: lot, ten (10) feet; garage, ten (10) feet.
 - [c] An O-S District boundary line: lot, ten (10) feet; garage, twenty (20) feet.
 - [d] An IPD District boundary line: lot, ten (10) feet; garage, twenty (20) feet.
 - [2] Any other district: lot, five (5) feet; garage, five (5) feet.

- [3] Notwithstanding any of the foregoing, any parking lot or garage located on a frontage which lot or garage is directly adjacent to any property on the same frontage zoned in a Residential District shall maintain a front yard line equal to the average front yard line existing or required, whichever is less, for all property on such frontage included in any Residential District.

(b) Other yards:

- [1] Abutting a Commercial or Manufacturing-Industrial District boundary line: zero (0) feet.
 - [2] Abutting a railroad right-of-way other than at a Residential District boundary line: zero (0) feet.
 - [3] Abutting an O-S District boundary line: ten (10) feet or one-half ($\frac{1}{2}$) the building height, whichever is greater.
 - [4] Abutting any street: same as front yard.
 - [5] All others: five (5) feet or one-third ($\frac{1}{3}$) of the building height, whichever is greater. Where property abuts a railroad right-of-way at a Residential District boundary line, the setback shall be measured from such boundary line.
- I. Signs. Sign regulations applicable in the T-P District are set forth in § 115-88 of this chapter.
- J. Use limitations. The following conditions and limitations shall apply to, and be complied with by, all uses and structures located in the T-P District:
- (1) Parking lots and garages in the T-P District shall be used exclusively for parking of passenger vehicles.
 - (2) Parking lots and garages in the T-P District shall be equipped and controlled to a degree sufficient to

discourage illegal parking, vandalism and other unlawful or nuisance-creating activities. When so equipped and controlled, such lots and garages may be operated twenty-four (24) hours a day. [Amended 9-25-79, Ord. 79-521]

- (3) Parking lots and garages in the T-P District shall be subject to all the provisions of § 115-90C of this chapter relating to the design and maintenance of parking lots and garages.
- (4) No commercial repair work or services shall be conducted in any T-P District except as expressly authorized in a special permit issued in accordance with Subsection G of this section.
- (5) No vehicular entrance or exit shall be located across the street from any property located in any Residential District, and each entrance to and exit from any parking lot or garage shall be at least twenty (20) feet from any property located in any Residential District, except that, with the consent of the owners and residents of the affected property, which should be submitted in writing with the application, this requirement may be waived by City Council without unusual physical or topographical conditions. [Amended 9-25-79, Ord. 79-521]
- (6) City Council may, in the ordinance establishing any particular T-P District, waive any of the conditions imposed by this Subsection J or impose any additional conditions not herein contained, when it finds that such action is warranted by reason of unusual physical or topographical conditions of the particular property or by reason of the particular uses and character of surrounding properties. The Director of Zoning shall cause any ordinance thus waiving or adding conditions to be promptly recorded with the City Clerk and shall, by notation on the District Zoning Map, indicate that the particular T-P District is subject to special conditions.

CHAPTER 7

AMENDING THE ZONING REGULATIONS AND ZONING MAP

1. Introduction

State enabling legislation in Delaware allows counties to create zoning districts and codes, and to amend the maps and texts of the code in the same fashion. In each instance, the procedures involved are legislative in nature, with recommendations coming to the County Council from the Planning Board and Planning Department prior to the Council's hearing and decision. Final action by the County Executive follows the signing of an ordinance by the President of the County Council. If the County Executive fails to act within 30 days of Council action, the ordinance becomes law, according to the County Charter.

Zoning map and zoning text changes each occur in distinctly different ways. Zoning map amendment applications are usually initiated by private landowners or by developers holding options on privately owned land. Zoning text amendments are more typically generated by planning staff work, occasionally at the direction of Council or the request of the Planning Board, as a response to development trends. Both procedures are legislative in nature, requiring extensive staff review and public hearings.

Traditional zoning has been justly accused of being static. It is the evolving nature of development patterns, land uses, and building types themselves that causes amendments to the zoning map and zoning code to be sought. Zoning made to correspond to the end product of a comprehensive plan or master plan targeted to a specific date years into the future cannot easily anticipate changes in technology, markets, or tastes and preferences. Hence, the zoning amendment process is a necessary and ongoing reflection of changing conditions in both site-specific and areawide matters.

A. Zoning Map Amendments

The process of changing a zoning map, often called simply "rezoning", is frequently thought of as a highly politicized and erratic process fraught with frustration for developers, neighboring property owners, planners, and local legislators. A hotly contested rezoning can be expensive, lengthy, and can consume considerable time and money for all parties. A goal of this study is to streamline the rezoning process. Distinct areas within New Castle County, the northern third in particular, have seen much greater development pressure and resultant requests for rezonings. These development pressures may not have been anticipated when the Zoning Code was originally mapped. As a result, substantial areas are zoned for large lot single-family residential use. A development proposal requiring amendment to the zoning map generates considerable review work for the planning staff and for other parties including utility companies.

B. Zoning Text Amendments

Text amendments are usually generated by the Department of Planning in response to changing conditions in the community. Occasionally, but very seldom, a text amendment is requested by a specific developer, in conjunction with a new

development prototype design. Examples of this might include fast-food restaurants with particular signage packages which do not conform to the current code standards or a housing developer with a new design type, such as the "twin-duplex" which does not fit any of the existing definitions of housing type in the code.

2. Innovative Techniques and Recent Trends in Rezoning

A considerable number of innovative techniques have been developed in recent years which speed the rezoning process or offer an alternative to it. Among these are "floating" zones, conditional rezonings, overlay zones, and various offshoots of the planned unit development concept. Each of these is discussed briefly below.

A. Floating Zones

The term "floating zone" refers to a zoning district which is written into the text of a zoning ordinance, but not placed on the zoning map until a development proposal is approved by legislative action. Floating zones are most commonly used for large scale unified developments including regional shopping centers, planned-unit residential developments and large industrial parks and such districts. Accommodation for these large developments is already incorporated in the New Castle County Code. The district regulations state conditions which must already exist for a landowner to apply for reclassification to the particular floating zone. With such basic standards fulfilled, the issues before the planners and legislature center on whether the proposed site is the best site in the area for such facility, whether there are any exceptional topographical or natural features on the site which should be considered, and general site planning concerns.

B. Conditional Rezoning

A conditional rezoning is one which is approved with conditions apart from the normal standards for the designated zoning district. Such conditions may relate to screening or buffering from adjacent properties, special provisions for water, sewer, and drainage, or addition of conditions to assure amenities in the design of the site or buildings. The conditions are frequently put in the form of a covenant restricting the land to comply with the conditions sought by the municipality.

In earlier years, courts had difficulty with the concept of conditional rezonings, but in more recent years, the practice has been more widely accepted. This acceptance has been tied to a relationship between conditions imposed and policies or provisions in comprehensive plans and those which clearly relate to the public health, enjoyment, and benefit. Where the conditions imposed are clearly for the purpose of assuring the compatibility of newly rezoned land and its development with surrounding uses and to enhance the development for the public benefit, court challenges should not be a problem.

In utilizing conditions in approval of a rezoning, care must be taken not to have the process appear to be contractual in nature. Courts have often invalidated "contract" zoning, which is characterized by a binding promise on the part of the municipality to delimit its power to rezone the land for a certain period of time after the conditional rezoning approval. The conditions

attached to the rezoning are those to which the developer has agreed in negotiation with the staff and legislative body. In New Castle County, conditional rezonings are fairly common, and take the form of deed restrictions which are filed with the ordinance approving the rezoning request.

C. Overlay Zones

Overlay zones are both described in the Zoning Code text and placed on the zoning map, but only in conjunction with other "underlying" zoning districts. Overlay zones may be used to add special restrictions or procedures to sensitive lands such as floodplains, hillsides, wetlands, or forests, but they may also be used to add categories of use to the development options of underlying districts, such as conversion to office or retail use. The advantage of overlay zones as compared to other discretionary devices is that the courts generally consider them to be clearly described in the Code and relate to purposes of the Comprehensive Plan. It is also possible to draft new overlay zones as unusual development needs occur, and to process the map and Code changes simultaneously, although this process may be lengthy due to the staff time required to draft the Code amendments.

D. Planned Unit Development (PUD)

PUD's are the most common type of "floating zone", mapped in response to development proposals. This mechanism is already part of the New Castle Code, and has been addressed extensively in Part I of this study.

E. Recent Trends in Zoning Amendment Techniques

In recent years, a growing number of communities in the United States, especially in western U.S. and the sunbelt region, have adopted codes which have emphasized lists of desirable characteristics for land development and the issuance of permits based upon these lists. Many of these "point system" approaches have recognized that design and environmental factors and other performance criteria have more direct effects on neighboring properties and the community than the particular use proposed, and have shifted from the permitted and prohibited use list approach to the performance standard approach. For example, a community may recognize that it is growing and that a regional shopping center or industrial park is likely to be attracted to the area, but not be able to predict the tract(s) of land most likely to be chosen for this use. A set of criteria or factors for approval of such a use is written and adopted as the development controls. Subsequently, when a proposal for a regional shopping center or industrial park is brought in, the staff can review each of the criteria and prepare a report for the Planning Board or Council which indicates whether each of the criteria has been addressed successfully in the proposal. In essence, the uses in the code all become "floating zones" to be mapped as proposals are forthcoming.

Such permit systems for land development have been adopted both in conjunction with, and as an alternative to, traditional districted zoning codes. Review criteria have included availability of utilities, traffic capacity of adjacent roads, buffering of edges of the site, growth control criteria (limiting the number of new dwelling units per year), usable open space, parking amount and location, provision of lower-cost housing, and environmental factors such as noise, vibration, dust, odor, and air pollution. Among the codes reviewed in

the literature for this section, five stand out as exceptional examples of innovative techniques associated with the rezoning process. These are codes from Petaluma, California; Boulder, Breckenridge, and Fort Collins, Colorado; and, Broward County, Florida.

The Petaluma and Boulder Codes both have a major purpose of limiting the residential growth of the community, to 500 units and 450 units per year, respectively. Developers wishing to build new housing must compete against each other based upon specific criteria. Petaluma has a point system which includes 10 separate factors for site design, building design, landscaping, amenities, and provision of low- and moderate-income units. Boulder's system allocates positive or negative points based upon public services and facilities, private facilities to be provided in the development, low- and moderate-income units, mitigation of adverse environmental impacts, and design and compatibility of the development with surroundings. Each of these evaluation systems is applied in addition to zoning and subdivision regulations.

The town of Breckenridge, Colorado, has replaced its zoning ordinance with a permit system based on an "absolute" standard system and a "relative" point system for reviewing development proposals. If an application fails to comply with any of the absolute policies, it is automatically defeated; positive or negative points are assigned to the proposal based upon the relative policies, and the project must score above zero to meet with approval and have a permit issued. The Breckenridge system has been recognized as a greatly streamlined system which owes its speed and simplicity of administration to carefully drawn policies having great clarity. The town has, in fact, only one planner, and all major projects are heard and decided by the Planning Commission within 40 days of submission of the application. It should be noted, however, that in abandoning the previous zoning regulations, all criteria relating to specific uses of land have been eliminated in favor of performance criteria.

Broward County, Florida, exacts monetary and/or land payments from developers of large tracts of land. The new Land Development Code, enacted in 1981, requires donations of land or monies for schools, parks, and roadways in proportion to the number of dwelling units to be included in the development. In conjunction with these exactions, the County has formed a Development Review Committee which represents fourteen agencies and divisions. A Development Managing Director administers the process and issues permits.

Fort Collins, Colorado, recently adopted a "Land Development Guidance System" which totally replaces a use-category zoning ordinance. This system has won the American Planning Association's highest award of merit. The introduction to the Ft. Collins document is duplicated as Appendix A to clarify the conceptual basis upon which that community decided to review development without zoning regulations. The basis of the system is the use of "point charts" which detail criteria, give them a weighting and a total point score for each major type of development activity. The charts from the Ft. Collins Ordinance applicable to all development and to the Neighborhood Service Centers category are duplicated as examples and appended as Items B and C to this chapter. These evaluations could be modified to permit their use as PZA evaluation methods, thus removing some of the "gray" areas in this process.

A major goal and presumed benefit of most of these new techniques for judging the appropriateness of a development proposal which would require legislative

action is the shortening of time for review and approval of the development. Defining the criteria for approval in written form, making it available in advance, enables developers or their agents to design their projects to provide the types of amenities or other features desired. This sequence can both speed their approval and provide the compatibility and benefit to the community that planners and council members seek in new development. Thus, carefully drawn evaluation criteria for development of each major category of development would enable the officials involved to determine quickly and simply what are the appropriate recommendations. If the criteria are properly described and represent the concerns of the community, complex conflicts between developers, neighbors, and community officials may be sharply reduced in the "rezoning" process.

3. New Castle County's Zoning Map Amendment Process

The legislative process as described in the Code and in the chart prepared in November, 1976 is lengthy, and provides several opportunities for protracted delays in the decision-making process. Streamlining the zoning map amendment process appears desirable, and could be achieved in several basic ways, including: shortening time limits for responses from support service providers, including time restraints in parts of the process where none exist, and placing additional responsibility on the applicant to effect the referral process.

A. Preliminary Zoning Application (PZA)

The PZA is a fairly quick advance application, costing only \$25.00 for the developer/applicant to obtain a recommendation from the Planning Department on the "advisability" of a rezoning application. This procedure has the effect of requiring the planning staff to make recommendations twice in the process and can serve as an early "screening" of proposals. The staff is directly involved at a later stage in gathering information for the Planning Board, holding a joint public hearing and issuing a formal recommendation with the Board.

However, the Preliminary Zoning Application part of the procedure does allow for early notification of the potential development to utility providers and to other concerned County departments. Another benefit of this process, although not specifically spelled out in the Code, is that it gives the developer an early opinion on the merits of the rezoning change request, and, if the staff recommendation is negative, the opportunity to withdraw or to significantly modify the request prior to requesting that an ordinance be drafted and before any formal public hearings by the Planning Board and County Council.

The process is also a fairly quick and uncumbersome one. Review of the Rezoning Tracking Charts supplied by the Planning Department indicate that the average PZA opinion is written within two weeks of receipt of an application.

B. Applicant-Initiated Ordinance Request

After the planning staff has prepared a written opinion on the PZA and sent a copy to the applicant and the Council member from that district, the next step in the process is one that the Code requires be initiated by the applicant. The applicant must ask the District Council member in County Council to request that an ordinance be prepared for this rezoning. A significant number of rezoning applications terminate at this stage. A breakdown of the disposition of all

zoning amendment applications commenced in 1981 is shown in Table 1 at the end of this section. Of the 63 zoning map amendment applications commenced in 1981, close to half (29) were not pursued after the Preliminary Zoning Application staff opinions were written. Of these, nearly three-fourths (3/4) received an "Inappropriate" recommendation from the planning staff.

If the Council member from that district requests that an ordinance be drawn, it is also incumbent upon the applicant to pay the second (higher) fee for processing the ordinance through two hearings, and to supply an accurate legal description of the ground to be rezoned. Payment of the fee in particular is likely to have the effect of generating second thoughts for the developer whose rezoning request has received an unfavorable opinion from the Planning Staff.

It is appropriate to keep the Preliminary Zoning Application process separate from the ordinance drafting and hearings process; the PZA screens out nearly half of the applications which would need to be processed through Planning Board and County Council hearings, many referrals, and additional meetings with staff.

C. Support Facilities Report

The next step, prior to the Planning Board/Planning Department hearing is to obtain information from Public Works, the State Highway Department and the Water Company serving the area and prepare a report. There are frequent delays at this step indicated by dates entered in the Rezoning Tracking Charts. Such delays are most likely caused by failure of other agencies - those that provide sewer, water, electric, gas, telephone or street improvements - to respond to the Planning Department's inquiries on a timely basis.

D. Hearings, Decisions, County Executive Sign-off

As soon as the Support Facilities Report is compiled, the rezoning case is scheduled and advertised for the Planning Board/Department hearing. This takes place at the first Board meeting of the month. Most often the planning recommendations are made two weeks later at their second monthly meeting. Occasionally, there is a one month delay for additional information after the close of the hearing.

The County Council public hearing is generally scheduled 17 days to 6 weeks after the planning recommendations, and the case is voted on by the Council at the same meeting. The County Executive then signs the ordinance, almost always within a week of Council action.

E. Overall Processing Time

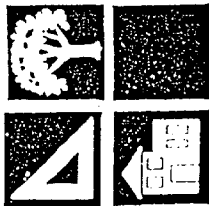
The average processing time for a Zoning Map Amendment is slightly over six months. There is a considerable variation, with some applications handled as quickly as three months, and others over one year. Cases which result in ultimate denial by Council, or in approvals with deed restrictions, tend to be the slower applications. While six months is not an unusual length of time for processing zoning amendments, the time could be shortened for routine applications.

Recommendations for shortening processing time of routine applications:

- Retain the Preliminary Zoning Application process as it is for Zoning Map Amendments initiated by private applicants.
- Create a hand-out for the applicant describing in detail his/her responsibilities for information to be submitted, fees involved, contact with the Council Member from that district, and anticipated timetable if all steps are carried out on a timely basis.

Potential remedies to delays in receiving reports from other agencies:

- Creation of a standard referral process which includes a deadline for comment and assumption that the agency can serve any development possible under the proposed rezoning if no comment is received by that date. Such a referral memo would need to describe the maximum potential developemnt under the proposed rezoning.
- Proceeding to the Planning Board/Planning Department hearing with a certain deadline, and issuing recommendations with contingencies for reports not yet received; such reports must be available prior to the County Council hearing.

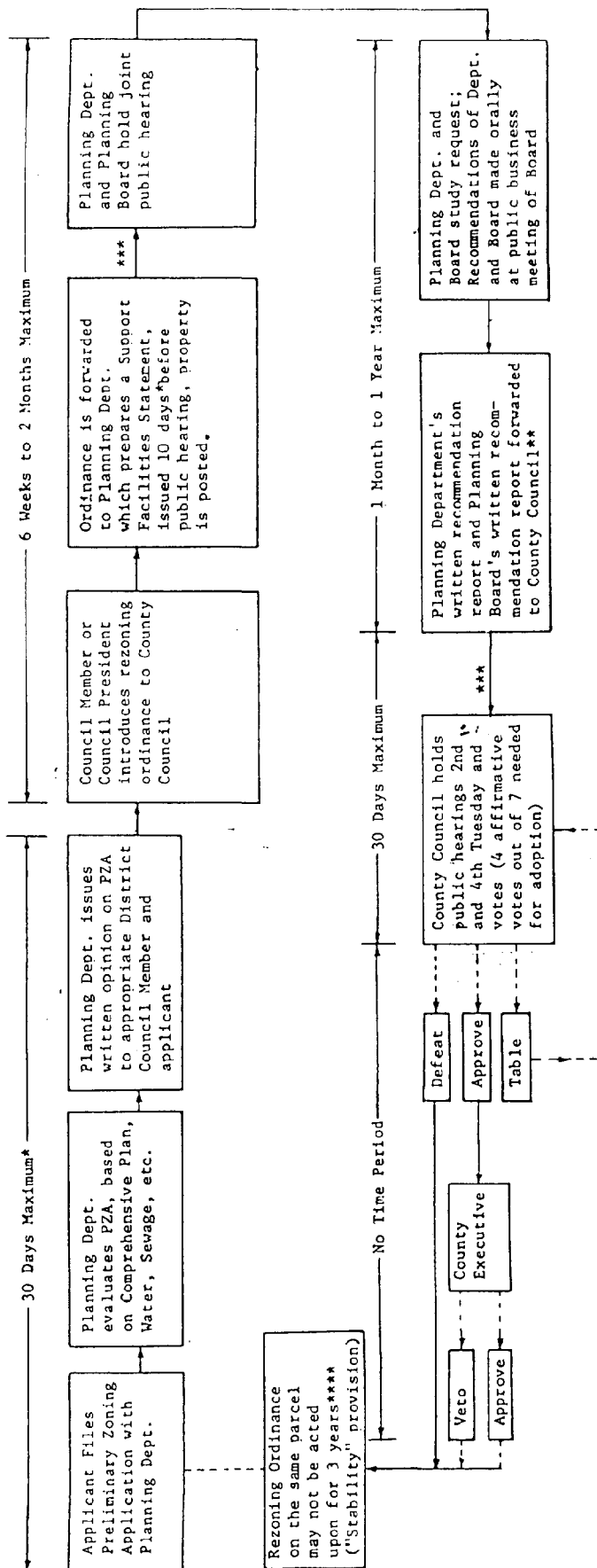


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NEW CASTLE COUNTY REZONING PROCESS



* Required by County Code

** The Planning Board and Department of Planning have 90 calendar days after the introduction of the ordinance in which to send their recommendation reports to County Council. The Department and/or Board may request 45-day time extensions by County Council for submitting recommendation reports if materials pertinent to the rezoning ordinance, e.g. traffic impact study, have not been received and/or evaluated.

*** Advertised in Legal Notices 17 days beforehand, required by County Code.

**** Three-year "Stability" provision may be waived if County Council finds that there has been a change in facts and circumstances or substantial and material new data exist.

TABLE 1
DISPOSITION OF ZONING AMENDMENT CASES - NEW CASTLE COUNTY
(cases commenced in 1981)

<u>Status</u>	<u>Number of Cases</u>
Not pursued to PZA report; incomplete application or information lacking	3
Not pursued after "Inadvisable" PZA recommendation	23
Not pursued after "Advisable" PZA recommendation	6
Not pursued after Ordinance preparation was requested	3
Not pursued after negative Planning Department/Planning Board recommendation (after hearing)	1
Withdrawn after County Council hearing	1
Approved (without deed restrictions)	13
Approved with Deed Restrictions	7
Denied by County Council	
- after "Inadvisable" PZA recommendation	3
- after "Advisable" PZA recommendation	1
Not concluded as of 8/82 (one was revised)	2
<hr/>	
TOTAL ZONING MAP AMENDMENT APPLICATIONS COMMENCED IN 1981	63
Text Amendments	
- Approved	1
- Not Completed	1
<hr/>	
TOTAL ZONING MAP AND TEXT AMENDMENT APPLICATIONS COMMENCED IN 1981	65

Data Source: New Castle County Department of Planning, Rezoning Tracking Chart

4. Potential Measures to Speed the Rezoning Process

A. Pre-Application Conferences

One measure which has proven useful in streamlining the process of rezoning and subdivision approval in many communities is the scheduling of a pre-application conference. Representatives of most, or all, the relevant support service providers and review agencies can come together to discuss the proposed development and begin to develop solutions to the provision of utilities and services to the project. Such conferences act as an "early warning" device for the affected service providers, for the developer/applicant, and for the planning staff. For larger scale development, such meetings are generally chaired by the Planning Director, a senior staff person designated by the Planning Director, or a Development Coordinator, where such a person exists. Some communities have an individual on their economic development staff who is assigned as coordinator/liaison person with all affected services and agencies, assisting the developer/applicants in cutting through bureaucratic "red tape" by making key contacts with the proper county staff or staff at public utility agencies.

Pre-application conferences are particularly appropriate for large-scale development, whether industrial, commercial, or residential, where the developer is an established corporation with a track record and procedural fast-tracking is desirable from the standpoint of the developer and the community. It is less apt to be useful in highly contested rezoning cases, and may be totally unnecessary for small developments. Discretion is needed by the Planning Director to determine when development conferences or pre-application conferences should be called and which agencies' representatives to include.

B. Reports on Support Facilities

Almost all rezoning applications in an urbanizing area require the extension of support facilities and services to the newly developing tract(s) of land. Numerous agencies, departments, and utility companies must be contacted and asked to report on their capacity to serve the proposed development. There are three main actors in this reporting function: the developer/applicant, the planning department, and the affected agencies. The burden of responsibility for obtaining information on capacity of support facilities may be assigned to any of these actors. Either the applicant or the planning staff may initiate the request for comments from the review agencies. Deadlines for their comments should be established. Thus it is incumbent upon the planning staff to set the deadlines for comments from the review agencies in relation to required dates for recommendations and hearings and to follow through to be certain that all necessary comments are received from the providers of support facilities.

The responsibility for providing sufficient information on the proposed development to the review agencies should rest with the developer/applicant; in large scale development, the developer generally expects to take this role. Smaller, less experienced developers may require more guidance on such matters from the planning staff. The developer/applicant should be aware that timely provision of information to support facilities providers will be essential to speedy processing of the rezoning request. However, the planning staff should be prepared to inform the providers of utilities and support services of the maximum potential development permitted under the proposed zoning district(s)

and that comments on those densities and uses are needed.

C. Review and Approval of Site Plans

One of the difficulties in administering zoning map amendments is the constant and natural curiosity about the specific development proposal that has triggered the rezoning application. Caution must be taken in the process, however, to focus primarily on the provisions and restrictions of the zoning district requested for the development, rather than the specifics of the design of the proposal at hand. (The new zoning designation will relate to the land, on a permanent basis, and the current proposal may not mature into development.) Detailed site plans should be required of the developer, and will be required in any case where there is a subdivision approval required concurrently. Modern performance zoning has tended to de-emphasize the use of the land and to add emphasis to the design of the use, particularly as it relates to neighboring properties and uses. Thus, many communities have required detailed site plan submissions in conjunction with rezoning requests.

If a site plan submission is required for rezoning, it should not be required at the earliest stages of the review procedure (Preliminary Zoning Application); it would tend to slow the review of the PZA, and could be a waste of effort for applications that clearly merit a negative recommendation at the PZA stage. After review of the PZA, staff may request a detailed site plan and suggest important criteria for its design elements, including major circulation patterns, grading, treatment of environmentally sensitive areas, and buffer or screening treatment at perimeters adjacent to other properties. Such features may subsequently be made conditions of the rezoning, to the extent that they have a clear relationship to the public interest and the protection of neighboring properties.

D. Negotiations and Modifications during Review

Negotiations with the applicant/developer during the hearings and decision process can be fruitful, particularly if there is consideration of deed restrictions or granting a zoning district change different from the original request. Specifically, an applicant/developer could be asked to come in to meet with the Director or his designee on the planning staff to effect a compromise district request (a less intensive district than the one requested originally), special design features such as heavy screening, earth berms, circulation improvements, landscaping or design improvements, after the public investigative hearing has brought forth neighborhood opposition and the planning staff has had the opportunity to meet to consider alternative solutions.

E. Deadlines for Actions

There are several places in the rezoning procedure where extensions of time are considered to be automatic or where there are not specific deadlines for action which would lead to the next step in the process. Among these are:

- automatic extension of 45 days after expiration of the original 45 day period for the Department of Planning and Planning Board to report their recommendations to the County Council.
- further extensions for the Planning Board/planning staff recommendations to

County Council may be granted by Council (the rezoning process chart indicates up to one year, although the Code is silent on this issue).

Such open-ended steps in the process may cause delays which can frustrate the developer and cause expenses to increase, occasionally to the point where the development proposal is withdrawn; such delays can cause an unintended non-growth policy. A reduction in delays, by generating a decision even in controversial cases is highly desirable.

F. Recommendations

(1) Pre-application Conferences

- Consideration should be given to holding pre-application conferences for all rezoning applications over 5 acres once an "Advisable" PZA recommendation has been made and the applicant has paid the fee for the hearings.
- All utility companies and public agencies which will need to provide facilities to serve the site development should be invited to the conferences, which would be chaired by the Director of Planning or his designee. Follow-up phone calls should be made to the most critical agencies to be sure that a representative will be attending the meeting.

(2) Support Facilities Coordination

- A standardized referral memo which lists all utility companies and public agencies in the distribution should be used. This memo should be sent upon receipt of the fee and property description for the hearings phase of rezoning application. A deadline for comments prior to the Planning Board/Planning Department public hearing should be set, with the understanding that any agency or department which does not respond by that date is able to serve development permitted under the rezoning request. This latter approach may be unrealistic but some method to assure a timely response is needed.
- The applicant should be provided with a written list of the agencies and departments, their addresses, telephone numbers, and name of a contact person to whom they should submit a map of lands to be rezoned, along with other necessary information. Instructions should make it clear that the onus of responsibility is on the applicant to provide needed information to these agencies.

(3) Submission of Site Plans

- Detailed site plans should not be submitted until after County Council approval of the rezoning application in non-PUD developments. Council ordinances in some cases may be conditioned within the ordinance to require approval of a detailed site plan by the Planning Board; such obligation to run with the land rezoned, in case the current applicant's plans fall through. County Council's ordinance should direct the Planning Board's review to focus on any specific features of the site or the development that concern the health, safety, and well-being of persons in adjacent areas of the County.

(4) Negotiations During Review

- Add a section describing negotiations during review, either by the Planning Board and staff or by the County Council, which clearly allows for such meetings and compromises with the applicant, and clearly state the County's ability to grant a different zoning district than the original request or to attach conditions. Suggested wording is as follows:

"Negotiations during review. Staff of the Department of Planning and of the County Council may call applicant in for negotiations and revision of the zoning amendment application subsequent to information obtained at the Planning Board public hearing." [New paragraph (c) to 23-85.1 (12).]

"The County may, in such cases where necessity dictates for the health, safety, and public welfare of the residents of the immediate area or the County as a whole, grant a lesser relief than the zoning district originally sought, or attach such conditions as are legally acceptable to mitigate potential adverse impacts of proposed development to the ordinance approving a rezoning request." [to be inserted as final paragraphh of 23-85.1 (13).]

5. Text Amendment Procedures

Processing of text amendments tends to proceed without direct neighborhood interest in most cases, because the change proposed is community-wide in scape and is not generally associated with a particular piece of land. However, advertising of the change should be done in the same manner as a map amendment, and should include any identifiable interest groups. Due to the fact that no specific parcel of land is usually involved in the hearings, slow-downs in processing of text amendments generally are few. The Preliminary Zoning Application step in the review process is unnecessary for text amendments generated by County Council request or by the planning staff. While in practice the PZA is omitted for most text amendments, the Code does not currently specify that it can be omitted.

A. Recommendations:

- (1) a paragraph should be added to Section 23-85.1(1)a clearly indicating that text amendments may be initiated by the Planning Director or any member of the County Council.
- (2) In cases where the text amendment is initiated by the Planning Director or is researched and drafted by the Planning staff upon request of a County Council member, the Preliminary Zoning Application procedure should be waived by the Planning Director. This waiver authority should be included in the Code.

6. References

- 1981 Zoning and Planning Law Handbook, Frederie A. Storm, Ed., Chapter 6,

"Reform of Discretionary Land Use Decision-Making: Point Systems and Beyond", Kurt Wickersham, Jr., pp. 77-94.

- The New Zoning: Legal, Administrative, and Economic Concepts and Techniques, Norman Marcus and Marilyn W. Groves, Eds., pp. 6-7, 23-42.
- The Administration of Flexible Zoning Techniques, Michael J. Meshenberg, Planning Advisory Service Report No. 318.

I. THE CONCEPT OF THE "LAND DEVELOPMENT GUIDANCE SYSTEM"

A. What is the "Land Development Guidance System"?

Fort Collins is changing daily in its physical form as a result of decisions made by a variety of public officials and private individuals. Nearly every decision that is made has at least some implications that go beyond the immediate matter at hand. Thus, it is important that the community have an overall set of objectives, policies, priorities, guidelines and standards to provide a framework of reference for the consideration of day-to-day decisions.

Since December of 1979, the Fort Collins Department of Planning and Development, assisted by Bob Komives, planning consultant, has undertaken an exhaustive study of matters relating to development and regulation of land within the Fort Collins urban area. The product of this research is the "Land Development Guidance System". The "system" will replace the existing Planned Unit Development regulations of the City and serve as a key mechanism by which the City guides the development of private land. The Land Development Guidance System will give landowners considerable flexibility in developing their property as long as the project conforms to certain general criteria designed to protect and improve the health, safety, convenience and general welfare of the people of Fort Collins.

The development potential of any particular site will be evaluated on its own merits--size, shape, location, natural features and site concept development--rather than according to a pre-determined zoning district classification. The system was carefully fashioned not only to fit prevailing conditions but also to satisfy future requirements as gauged by the Land Use Policies Plan, Goals and Objectives, and sound planning principles. Finally, the system assures new development meets not only physical, but social, economic and aesthetic needs of the City of Fort Collins.

B. On what is it based?

The basis for the "Land Development Guidance System" is found in the City's adopted Land Use Policies Plan, Energy Conservation Plan, the City's Charter, and Colorado State Statutes.

The impetus to developing the system is found in the Land Use Policies Plan, Policies 18, 19, and 20, which call for the development of an industrial "point" system, project impact

assessment system, and land use, site planning and urban design criteria, respectively. The proposed system is designed to achieve each of these policies in a single comprehensive document. Secondly, major impetus for several sections is found in the adopted Energy Conservation Plan which calls for research and development of ordinance revisions that will address and use energy conservation techniques.

Many of the individual criteria and incentives are directly attributable to specific policies within the Land Use Policies Plan, for instance, Policies 21, 22, 26, 27, 41, 46, 47, 50, 51, 55-66, 68-74, 76-80, 84, 88, 89 and 92. Other policies are indirectly attributable to or implied within the system, for example, Policies 3, 6, 44, 48, 49, 67, 75, 82 and 91.

The legal authority granting the City of Fort Collins the right to conduct the implementation of land use plans is granted in the City's Charter Article XIX, Planning and Zoning. Article XIX established a City Planning and Zoning Board and describes the functions of the Board. The Charter also lists as a function of the City's Planning and Zoning Board, "To exercise the authority vested in it by State zoning laws". A recent piece of legislation (CRS 29-20-101, et seq), commonly referred to as House Bill 1034, and 30-28-106, commonly known as Senate Bill 150, amended the Colorado Revised Statutes 1973 to include the following powers for local governments:

1. Regulate the location of activities and developments which may result in significant changes in population density.
2. Provide for phased development of services and facilities.
3. Regulate the use of land on the basis of its impact on the community or surrounding area.
4. Plan for and regulate the use of land so as to provide planned and orderly use of land and protection of the environment in a manner consistent with Constitutional rights.
5. Providing for the utilization of solar energy in land use regulation.

C. Why change existing regulations?

The Land Development Guidance System is the result of several years of review by the City of Fort Collins of the quality, quantity, and process of development. While existing zoning and

subdivision regulations have been successful in preventing disastrous growth patterns, several weaknesses were found. These have been reduced or eliminated in the Land Development Guidance System.

1. Changes in zoning were occurring on a site-by-site basis independent of the eventual site design which would ultimately determine the compatibility of the proposed land use with the surrounding neighborhood. Further, under zoning regulations, some uses are barred from districts where similar uses are permitted with no logical basis for such differentiation. Under the new system, no land use is automatically excluded from a specific site. Rather, criteria are established which ensure that each land use will be compatible with adjacent land uses as well as foster a healthy growth pattern for the community as a whole. A site plan is required to evaluate the applicant's success or failure to address these criteria. If the criteria are met, the use may proceed.
2. While the present Planned Unit Development Ordinance permits the developer more creativity and flexibility than the strict application of the zoning and subdivision regulations, the density of residential areas and allowable uses are bound by rigid and arbitrary limits that do not always reflect the capacity of the site and neighborhood. The ever-changing residential market place has responded to the need for flexibility far more quickly than has traditional zoning. Under the new system, a base density is set to make certain a minimum efficient service delivery. The maximum density depends on the performance of the site plan and its location relative to criteria which reflect factors important to neighborhood capacity and City form.
3. "What it takes to get by" is most often the level of creativity fostered by the traditional development regulations. While Fort Collins is fortunate to deal with developers and a buying public that generally expect and demand more than minimum quality development, the existing zoning and subdivision regulations provide no incentives or rewards for excellent design and creativity. Beyond the minimum levels of performance, the Land Development Guidance System requires a high level of design to ensure neighborhood quality. The system offers the developer flexibility to choose from a variety of design criteria to achieve the minimum number of points for approval. Thus, while a higher level of design is required from the developer, it is matched by increased flexibility.

Likewise, the system provides a mechanism for regulating land development activity on the basis of energy conservation, housing price (low income housing), amenities, accommodation of alternative transportation modes, public fiscal impact and other important aspects of growth which zoning and subdivision regulations ignore.

4. A frequent complaint cited by both developers and citizens is that the existing Zoning and P.U.D. review system is unclear and inconsistent. Using the list of criteria for each project can help reduce differences in evaluation from staff member to staff member. The City Council and Planning and Zoning Board should be less susceptible to charges of inconsistent treatment than when ad hoc evaluations are used. Consistency in measures and terminology can also make it easier to compare data from different development proposals. The explicit listing of criteria used in evaluation, and the repeated use from case to case, should help all parties better understand the basis for decision-making in advance. The emphasis on end impacts from the citizen's view helps ensure the relevancy of the evaluation. Finally, a clearer, more precise set of criteria should help decision-makers explain and defend decisions, making it easier to demonstrate that a thorough, rational, fair, and consistent approach was used.
5. The existing approach to development evaluation often overlooks some significant adverse impacts. Conventional zoning does not always contain the performance standards to protect adjoining landowners. The advantage of the new system is that major impacts are identified at the beginning of the process. Besides helping to assure that these large impacts are not missed, the system's comprehensive approach helps identify less obvious, but important, impacts by requiring all aspects of a plan to be explicitly considered.
6. The conventional zoning system for regulating land development has often been accused of unpredictability. Zoning has always involved two conflicting interests--the neighboring land owner who wants the property to remain vacant or at a lower or identical intensity to his, and a developer who wants a higher intensity use. The City Council and Planning and Zoning Board must continually determine whose interests prevail: One must win; the other must lose. The rules of zoning do not allow much latitude for compromise. The new system includes extensive considerations based upon design factors to insure neighborhood compatibility. The developer will get his profit; the neighbor gets his protection.

7. The existing zoning system is supposed to provide equal guidance for infill, as well as peripheral, developing properties. But traditionally, zoning regulations have responded much more clearly to the needs and requirements of new developing areas. Consequently, the regulations are imprecise in dealing with infill projects, work at cross purposes and often serve as a brake to redevelopment. The Land Development Guidance System is designed to provide a balanced set of criteria for all types of development, as well as to establish criteria for infill development which is currently missing within the existing regulations.
8. Finally, a major reason why conventional zoning has failed to come to grips with land use planning is the requirement that all land within the City limits be zoned. What has occurred as a result, is that land has been zoned for very low density in spite of both the City's and developer's full knowledge that a change in zoning will be requested as development pressure increases. This use of a low density zone as a holding zone casts suspicion on both the real purpose of low density districts and on the zoning ordinance as a whole. This has led to further complications; as people build in these low density areas, they create pressure to maintain those areas at that density, regardless of what the areas might be best suited for in terms of the City's overall plans and needs.

The above items demonstrate the weaknesses of conventional zoning as a land regulatory mechanism. Even with the fine tuning of the City's ordinance with the present Planned Unit Development Ordinances, Transitional Zones and limited performance standards, it has not often worked. A radical departure from tradition is necessary. The Fort Collins Land Development Guidance System fosters a creative partnership between private enterprise and the community. Through this partnership the public good sought in the Comprehensive Plan is pursued, and the opportunity to make sound market decisions by the developer and sound planning decisions by the City is increased.

D. What assumptions have been made?

The Land Development Guidance System is based upon several assumptions and conclusions regarding the land development process in Fort Collins.

1. That any land use likely to occur in Fort Collins can in most cases be made compatible with any neighboring land use through careful design and buffering. Similarly, two

otherwise compatible uses can be poor neighbors as a result of poor design and buffering.

2. Site design, use, and, in many cases, architectural design review, are critical for all development.
3. Increasing the opportunity for higher density residential development and mixed land uses is good for the community. While the increasing cost of usable energy favors a more compact and mixed land use pattern of development, the trend has been to greater dispersion, less diversity, and generally lower densities. Higher densities and land use diversity should be encouraged and accommodated in an effort to reverse this trend. Similarly, when higher density development is combined with energy efficient locational criteria, the result is reduction in the length of roads and utility systems which decreases costs of development, drain on city resources and usage of fuel.
4. The City should encourage the provision of low income housing, energy conservation and other important goals of the City through an incentive program.
5. The City should encourage larger scale development on the periphery of the City through an incentive program. A larger site generally is able to provide more innovation and variation in design, increased efficiency in utility services, and to accomplish many more of the objectives of the City than do smaller development sites. However, this assumption is not made at the expense of the established areas of Fort Collins. Rather, the Land Development Guidance System is equally effective in the established areas of Fort Collins.
6. The private market is in a better position to determine the appropriate location of industrial uses and regional/community shopping centers than the City of Fort Collins. Merely designating areas in which land is available for industrial development or those uses of regional impact on a zoning map has done little to attract or to control industrial land uses or regional/community shopping centers. Rather, the choice of location is a product of a myriad of private decisions dealing with availability of suitable sites at reasonable prices, adequate street access, availability of utilities and a skilled labor force. The City should be concerned with the performance of particular uses rather than their location on a zoning map.

7. The City of Fort Collins should provide guidance for the location of higher density residential and neighborhood commercial uses. Proper planning of residential areas and the location of higher density residential areas and neighborhood commercial uses can result in lower economic costs, environmental costs, natural resource consumption and some personal costs for present and future residents.
8. Higher density can be an incentive for residential developers to incorporate measures which address larger community needs, such as low income housing and energy conservation, which otherwise might be ignored.
9. The system should incorporate recognition that there are trade-offs among quality attributes of a project and also among City objectives.
10. The system should recognize that certain policies and criteria are of more or less importance than others through the establishment of weighting factors.
11. Both the public and the development industry can benefit from a more predictable and flexible regulatory process. Nothing is more predictable than a specific zoning district for a specific use. Unfortunately, the criteria for changing a specific zoning on a parcel of land are vague enough that the likely outcome of a rezoning request is difficult to predict. As a result, the general public loses faith in the process, and the developer is forced to take substantial financial risk. A system which makes the criteria for approval more explicit and predictable is of benefit to all parties.

Appendix B. Ft. Collins, Colorado, Point Chart for All Development

All Development				POINT CHART A			
All Criteria				Applicable Criteria Only			
CRITERION	Is the Criterion Applicable Yes No	Circle the Correct Score Yes VW No		Multiplier	Points Earned	Maximum Applicable Points	SCORE
PHASING							
a Urban Contiguity		X	2	0	-5		
URBAN DESIGN							
b Building Variety		1	2	0	2		
c Clustering		1	2	0	3		
d Solar Orientation		1	2	0	4		
e Slopes/Solar Access		1	2	0	3		
f Height/Solar Access		1	2	0	4		
g Outdoor Space		1	2	0	3		
h Access to Recreation		1	2	0	3		
i Range of Open Space		1	2	0	2		
j Entrances/Wind		1	2	0	2		
k Entrances/Walkway		1	2	0	2		
l Entrances/Crossings		1	2	0	1		
m Entrances/Nodes		1	2	0	2		
n Entrances/Open Space		1	2	0	2		
o Works of Art		1	2	0	1		
p Architecture		1	2	0	3		
CIRCULATION							
q Street System Design		1	2	0	2		
r Joint Driveways		1	2	0	3		
s Sidewalk/Non-local		X	2	0	2		
t Sidewalk/Local		X	2	0	1		
u Pedestrian Convenience		1	2	0	2		
v Building Connection		1	2	0	1		
w Pedestrian/Auto		1	2	0	1		
x Low Interest Areas		1	2	0	2		
y Path Landscaping		1	2	0	1		
z Path Lighting		1	2	0	1		
aa Street Landscaping		1	2	0	4		
bb Bikepaths		1	2	0	3		
RESOURCE PROTECTION							
cc Historic/Environment		1	2	0	2		
dd Historic/Character		1	2	0	2		
ee Historic/Adaptive Use		1	2	0	2		
ff Energy Landscaping		1	2	0	3		
gg Solar Landscaping		1	2	0	3		
hh Gardens		1	2	0	1		
ii Structured Parking		1	2	0	1		
jj Steep Slopes		1	2	0	2		
kk Water as an Amenity		1	2	0	2		
ll Water Quality		1	2	0	1		
mm Water Conservation		1	2	0	2		
nn Air Quality		1	2	0	1		
PUBLIC SERVICES & FACILITIES							
oo Fire Protection		1	2	0	2		
pp Police Protection		1	2	0	2		
qq Major Drainage		1	2	0	2		
VW very well done				Subtotals			

Add the subtotals from Point Chart A to the totals from Point Charts B through F that apply.

The project must earn 65% of the maximum applicable points.

Points Earned		Maximum Applicable Points
(col. iii)		(col. iv)
_____	A	_____
_____	B	_____
_____	C	_____
_____	D	_____
_____	E	_____
=====	F	=====

v

vi

$\frac{v}{vi} = vii$

Percentage earned of maximum applicable points

vii

%

minus 65%

Quality bonus

NEIGHBORHOOD SERVICE CENTER					POINT CHART B				
For All Criteria					Applicable Criteria Only				
Criterion	Is the Criterion Applicable		Circle the Correct Score			Multiplier	Points Earned I x II	Maximum Applicable Points	
	Yes	No	Yes	VW*	No				
	a Transit route			X	2	0	2		
b At collector/arterial			X	2	0	3			
c "North" Fort Collins			X	2	0	2			
d From regional center			X	2	0	1			
e From neighbor. center			X	2	0	2			
f S. College corridor			X	2	0	4			
g Non-arterial access			X	2	0	3			
h Joint parking			1	2	0	3			
i Grocery store			X	2	0	3			
j Energy conservation			1	2	0	4			
k			1	2	0				
l			1	2	0				
*VW-Very Well Done							Totals		
Transfer Totals to Point Chart A							V	VI	
Percentage Earned of Maximum Applicable Points							$V/VI = VII$	<div style="border: 1px solid black; padding: 2px; display: inline-block;">% VII</div>	

CHAPTER 8

SITE PLANS FOR COMPREHENSIVE RESIDENTIAL DEVELOPMENTS

1. Introduction

The purpose of this chapter is to identify the relationship between an unusual section of the code, Section 23-9 which provides for a generalized variance for large residential developments on a highly discretionary basis and the Planned Unit Development portions of the code. Further the purpose is to identify the utility of Section 23-9 and comment on its potential use. A key reason for this evaluation is that this portion of the code, site plans for comprehensive residential developments, has been employed only a very few times for development in the County, despite its relative freedom from enumerated restrictions. In order to proceed with this analysis a close examination of Section 23-9 is in order. What follows is the text of the section, slightly abbreviated:

Sec. 23-9. Site plans for comprehensive residential developments.

Upon presentation to the board...of a site plan showing the locations, dimensions and elevations of buildings and the locations of open spaces for the special treatment of an area of not less than twenty acres and lying in one or more residence districts, the board may, after public notice..., recommend to the county council a variance from the use, height and area provisions of this chapter, but not including any use permitted only in a commercial or a manufacturing district.

Such recommendations ... only after submission...to the department of planning and a determination ... that such plan conforms with its standards in regard to those features which come under its jurisdiction in control of subdivision. In addition, the board ... shall find that the proposal conforms with the following special requirements:

(1) The open spaces around buildings and lot areas are equal to or greater than the total required ... under the yard and area of lot restrictions for the district ...

(2) The provision of light and air is ... adequate to the special circumstances and...equivalent to the requirements ...

(3) The minimum distance between any two buildings will be not less than the average height of opposite walls and in no case less than sixteen feet, where two buildings front on the same street or where opposite walls face each other, or overlap, for a distance of six feet or more.

(4) It will ... establish a residential environment of sustained desirability and stability and in harmony with ... the surrounding neighborhood.

On receipt of such recommendation from the board of adjustment, the

county council may by ordinance grant such variance, approve the plan ... and direct the issuance of certificates....

2. Analysis

The first paragraph cites perhaps the most fundamental feature and, perhaps, weakness of this Section: "... the board may, ... recommend to the county council a variance from the use, height and area provisions"... (emphasis added). What a developer asks for, under this procedure is that a variance be granted, for all or much of the development. A variance is intrinsically inferior to a traditional rezoning as it implies a non-conformance to use, height or area provisions of the code. A non-conformance may face special restraints if attempts are made later to modify the project and it confers more restricted rights, essentially only the right to do exactly what has been proposed. This may be described as "site plan zoning". This drawback may be quite serious or, at least, be perceived as serious in large developments constructed incrementally.

The second paragraph provides the key procedural element designed to assure development quality. The critical point here is that there must be a submission to the Department of Planning and "a determination that such plan conforms to its standards ... under its jurisdiction in control of subdivision." The jurisdiction of subdivision controls is quite broad encompassing "... promoting the health, safety, convenience, order, and welfare of the citizens..." Specifically these controls include Article II, Land Planning Policies calling for coordinated land planning, avoidance of strip development, safe and efficient street design and numerous other desirable goals. As a result of this broad mandate "... plan conforms to its standards..." the Department of Planning has wide authority to make input to any plan submitted for this broad variance system. This feature might be characterized from a developers perspective as at least as much and perhaps more exposure to revision than would occur under "matter of right" submission applications. It is our belief that this fact compounds the problem of construction under variance rather than fixed zoning because the developer is likely to perceive himself as having little or no leverage in the situation. Most developers assume that some concessions or relaxation of regulations will be available to them in any case, particularly if they are in compliance, or close to compliance, with the permitted development. In DPUD the developer gets approval for an overall plan, including unit count, and can then provide actual development plans for one segment at a time. Later revisions especially those involving reductions in unit count, can then be approved administratively - a situation which gives developers considerable confidence that they can change their plans unhindered.

In addition to these general requirements and procedures there are four development controls listed. These too, are of a general nature and permit wide discretion in site planning.

Open space must be equal to or greater than that which would have been required in the underlying zoning. This provision is logical but leads to a complex computation if it is taken literally. For instance in an R-2 and R-1-CC underlying zoning the percentage of unbuilt lot area in, matter of right developments, could often be in the vicinity of 77%. Table 1 below illustrates this problem with hypothetical numbers.

	R-2	R-1-CC	Total
1. Site Area	15 acres (653,400 s.f.)	5 acres (217,800 s.f.)	20 acres (871,200 s.f.)
2. Roads approx. 10%	65,000 s.f.	21,000 s.f.	86,000 s.f.
3. Buildable lots (right)*	27	20	47
4. Building coverage (50' x 35')			82,250 s.f.
5. Driveway average (60' x 12' x 47')			33,840 s.f.
6. Coverage total 2 + 4 + 5			202,090 s.f.
7. Potentially required open space (1-6=)			669,110 s.f.
8. % potentially required open			77%

* estimated "matter of right"

A literal interpretation of these numbers would indicate that the actual intention of this broad variance power is to permit highly concentrated developments on large sites. As there is no unit count limitation a developer could propose virtually any type of dense housing from row units to high rise provided that building coverage and parking coverage (not open space) remain at 25% total. An examination of several actual development site plans provision ignored this open space requirement entirely. Rather more intense developments have used this process and apparently calculations like the one above were never considered.

This hypothetical development characteristics analysis can be carried further but it would not contribute greatly because it is very speculative and, as a matter of practice, irrelevant.

2. The provision of light and air must be "adequate to the circumstances and equivalent to the requirements". This is a basic concept to all zoning and reiterates responsibilities within the subdivision regulations.
3. The minimum spacing requirement requires the distance between "overlapping" buildings to be at least the height of the walls facing each other or 16 feet whichever is greater. This again is a basic concept although this is a minimal regulation, very much in keeping with the unfettered spirit of this variance process.
4. The development must have "sustained desirability and stability and (be) in harmony with the surrounding neighborhood". This constraint if interpreted

literally, would be a rather difficult one in that the development types which may be encouraged in this process are not likely to be similar to adjacent standard developments. If they were to be similar a rezoning to some overall standard classification would usually be preferable.

The last paragraph calls for County Council to grant the variance by ordinance. This is an interesting point because a "variance" is traditionally granted by the board of adjustment. Presumably the "master variance" which this may encompass is different in character as it is based on a specific development plan. In comparison, were a concentrated row home development to be granted by variance at the board the list of variances would be lengthy, including lot area, setback, side and rear yards, use (attached dwelling) all multiplied by the number of units, and perhaps others. It is important to note that while this type of enormous variance list is usual it is possible for the Board of Adjustment to grant such a list, albeit unlikely.

3. Conclusions and Recommendation

It is the view of the consulting team that in most respects development conducted under 23-9 will be less well conceived and potentially inferior to the DPUD type development. As is usual in any case the specific qualities of the developers, their personal and marketing orientation, will determine the desirability of the finished product. Little evidence was found that the short list of development controls provided for Section 23-9 were taken seriously but there was fairly careful review by the Department of Planning. The use of this system has apparently come about in several cases as an outlet method, when a basic rezoning was not possible. This is interesting in that the rezoning of the ground involves no more bureaucratic steps than this system. One difference, while no governmental steps are saved, is that the developer goes directly into the subdivision process and, if supported by the Department may save some preparation time by avoiding the DPUD plan submission system. It is not clear whether or not any real savings occurs this way but our view is that a defined process of plan submission is usually preferable.

A second aspect which may be useful to developers and the planning staff as well is that there may be major unit count "bonuses" in this process. In the few past cases the proposals consisted of townhouses, garden apartments and other types not permitted in the underlying zoning. This unit count bonus should be traded for some definite value, i.e., the county should get good quality open space, good site planning, and good landscaping as a minimal trade for the increase in density.

As a result of this limited evaluation we would recommend retaining this section of the code, because of its value as an outlet to "site plan zoning", and that a number of minor changes be made to the criteria for granting this "master variance".

Proposed changes:

Procedural: No change is needed if the County follows the subdivision procedures in documentation of the developments.

Site Area: A decrease to ten acres would not be unreasonable because, as noted in Phase I under DPUD, it is often the smaller "infill" sites which face the

